July 24, 2020

Report to:

Lynda Lombardi

Wood - E&I Solutions, Inc. 10940 White Rock Road

Suite 190

Rancho Cordova, CA 95670

Bill to:

Ashley Shively

Wood - E&I Solutions, Inc. 10940 White Rock Rd

Ste 190

Rancho Cordova, CA 95670

Project ID:

ACZ Project ID: L57215

Lynda Lombardi:

Enclosed are revised analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on February 03, 2020 and originally reported on April 10, 2020. Refer to the case narrative for an explanation of the changes. This project was assigned to ACZs project number, L57215. Please reference this number in all future inquiries.

All analyses were performed according to ACZs Quality Assurance Plan. The enclosed results relate only to the samples received under L57215. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZs current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after May 10, 2020. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZs stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.





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# Case Narrative

Wood - El Solutions, Inc. July 24, 2020

Project ID:

ACZ Project ID: L57215

#### Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 20 miscellaneous samples from Wood - E&I Solutions, Inc. on February 3, 2020. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L57215. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

#### **Holding Times**

All analyses were performed within EPA recommended holding times except for the following.

- 1. Mercury (H1) The samples were extracted and analyzed past the hold time of 28 days. The hold time does not reset after extraction.
- 2. Cyanide (H1) The MWMT extraction was performed past hold however, samples were prepped and analyzed by Wet Chemistry department within the post extraction hold time.
- 3. Nitrate/Nitrite (H1) Sample analysis performed past the 48 hour past extraction holding time. They were not on the LIMS backlog until past hold.
- 4. Nitrogen, T. Kjeldahl (HD), Nitrite, Chloride, Sulfate Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to analysis.

#### Sample Analysis

These samples were analyzed for inorganic, radiochemistry parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

This project was revised on 07/24/2020 to add analysis times for pH and alkalinity. No other changes were made.

This project was revised on 05/04/2020 to correct the sample dates and times for the pH by MWMT. No other changes were made.

REPAD.03.06.05.01

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Project ID:

Sample ID: WRSB206\_145-155

ACZ Sample ID: **L57215-01** 

Date Sampled: 01/22/20 10:28 Date Received: 02/03/20

Sample Matrix: Soil

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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 12:11	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 9:53	jlw
ICPMS MWMT Prep	M6020B ICP-MS								03/27/20 5:43	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 11:18	rbt

## Metals Analysis

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	03/30/20 22:56	jlw
Antimony (MWMT)	M6020B ICP-MS	1	0.0015	В	*	mg/L	0.0004	0.002	03/31/20 13:35	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0845			mg/L	0.0002	0.001	03/31/20 13:35	enb
Barium (MWMT)	M6010D ICP	1	0.010	В	*	mg/L	0.007	0.04	03/30/20 22:56	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:35	enb
Boron (MWMT)	M6010D ICP	1	1.14			mg/L	0.02	0.1	03/30/20 22:56	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:35	enb
Calcium (MWMT)	M6010D ICP	1	3.4		*	mg/L	0.1	0.5	03/30/20 22:56	jlw
Chromium (MWMT)	M6020B ICP-MS	1	0.0008	В	*	mg/L	0.0005	0.002	03/31/20 13:35	enb
Cobalt (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:35	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0053		*	mg/L	0.0008	0.002	03/31/20 13:35	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 22:56	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:35	enb
Lithium (MWMT)	M6010D ICP	1	0.019	В	*	mg/L	0.008	0.04	03/30/20 22:56	jlw
Magnesium (MWMT)	M6010D ICP	1	0.5	В	*	mg/L	0.2	1	03/30/20 22:56	jlw
Manganese (MWMT)	M6020B ICP-MS	1	0.0014	В	*	mg/L	0.0004	0.002	03/31/20 13:35	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:30	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.120		*	mg/L	0.0002	0.0005	03/31/20 13:35	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:35	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 22:56	jlw
Potassium (MWMT)	M6010D ICP	1	2.1		*	mg/L	0.2	1	03/30/20 22:56	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.001		*	mg/L	0.0001	0.0003	04/01/20 9:00	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:35	enb
Sodium (MWMT)	M6010D ICP	1	139			mg/L	0.2	1	03/30/20 22:56	jlw
Strontium (MWMT)	M6010D ICP	1	0.046	В	*	mg/L	0.009	0.05	03/30/20 22:56	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:35	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:35	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 22:56	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 22:56	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0107		*	mg/L	0.0001	0.0005	03/31/20 13:35	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.211			mg/L	0.0005	0.002	03/31/20 13:35	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:35	enb

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB206\_145-155 ACZ Sample ID: L57215-01

Date Sampled: 01/22/20 10:28

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	8.8		units	0.1	0.1	03/21/20 17:45	gkh
Temperature		1	20.2		С	0.1	0.1	03/21/20 17:45	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	9.0		units	0.1	0.1	02/21/20 12:55	nnk
Temperature		1	22.3		С	0.1	0.1	02/21/20 12:55	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/21/20 0:00	gkh
Extraction pH		1	4.91		units			03/21/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/21/20 0:00	gkh
Extraction Time		1	56		hrs			03/21/20 0:00	gkh
Leachate Volume		1	4547.2		mL			03/21/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/21/20 0:00	gkh
Post Filter pH		1	8.67		units			03/21/20 0:00	gkh
Pre Filter pH		1	8.76		units			03/21/20 0:00	gkh
Retained Moisture			0						SREV
Temperature		1	20.2		С	0.1	0.1	03/21/20 0:00	gkh
Time In		1						03/21/20 0:00	gkh
Time Out		1						03/21/20 0:00	gkh



Project ID:

Sample ID: WRSB206\_145-155

ACZ Sample ID: **L57215-01** 

Date Sampled: 01/22/20 10:28

Date Received: 02/03/20

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	147		*	mg/L	2	20	03/27/20 14:57	еер
Carbonate as CaCO3		1	9.8	В	*	mg/L	2	20	03/27/20 14:57	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 14:57	еер
Total Alkalinity		1	157		*	mg/L	2	20	03/27/20 14:57	еер
Chloride (MWMT)	SM4500CI-E	1	29.8		*	mg/L	0.5	2	03/27/20 10:22	wtc
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:02	mss2
Fluoride (MWMT)	SM4500F-C	1	6.2		*	mg/L	0.1	0.4	04/03/20 11:05	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		< 0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	03/26/20 23:35	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	03/26/20 23:35	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	03/28/20 19:34	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	410		*	mg/L	20	40	03/26/20 17:48	jck
Sulfate (MWMT)	D516-07 - Turbidimetric	5	101		*	mg/L	5	25	03/27/20 11:49	wtc

03/27/20 12:07

rbt

Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB206\_175-182

ACZ Sample ID: **L57215-02** 

Date Sampled: 01/23/20 14:00

Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep									
Parameter	EPA Method	Dilution	Result	Qual X	(Q U	Inits MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*			03/27/20 12:45	mss2
ICP MWMT Prep	M6010D ICP							03/27/20 10:21	jlw
ICPMS MWMT Prep	M6020B ICP-MS							03/27/20 6:12	enb

Nitrogen, total Kjeldahl M351.2 - Block Digestor

(MWMT)

Metals Analysis
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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	03/30/20 23:00	jlw
Antimony (MWMT)	M6020B ICP-MS	1	0.0013	В	*	mg/L	0.0004	0.002	03/31/20 13:38	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0744			mg/L	0.0002	0.001	03/31/20 13:38	enb
Barium (MWMT)	M6010D ICP	1	0.010	В	*	mg/L	0.007	0.04	03/30/20 23:00	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:38	enb
Boron (MWMT)	M6010D ICP	1	0.72			mg/L	0.02	0.1	03/30/20 23:00	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:38	enb
Calcium (MWMT)	M6010D ICP	1	6.0		*	mg/L	0.1	0.5	03/30/20 23:00	jlw
Chromium (MWMT)	M6020B ICP-MS	1	0.0007	В	*	mg/L	0.0005	0.002	03/31/20 13:38	enb
Cobalt (MWMT)	M6020B ICP-MS	1	0.00005	В	*	mg/L	0.00005	0.0003	03/31/20 13:38	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0061		*	mg/L	0.0008	0.002	03/31/20 13:38	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:00	jlw
Lead (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0005	03/31/20 13:38	enb
Lithium (MWMT)	M6010D ICP	1	0.012	В	*	mg/L	0.008	0.04	03/30/20 23:00	jlw
Magnesium (MWMT)	M6010D ICP	1	1.0		*	mg/L	0.2	1	03/30/20 23:00	jlw
Manganese (MWMT)	M6020B ICP-MS	1	0.001	В	*	mg/L	0.0004	0.002	03/31/20 13:38	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:31	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0523		*	mg/L	0.0002	0.0005	03/31/20 13:38	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:38	enb
Phosphorus (MWMT)	M6010D ICP	1	0.2	В	*	mg/L	0.1	0.5	03/30/20 23:00	jlw
Potassium (MWMT)	M6010D ICP	1	2.9		*	mg/L	0.2	1	03/30/20 23:00	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0011		*	mg/L	0.0001	0.0003	04/01/20 9:02	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:38	enb
Sodium (MWMT)	M6010D ICP	1	81.0			mg/L	0.2	1	03/30/20 23:00	jlw
Strontium (MWMT)	M6010D ICP	1	0.060		*	mg/L	0.009	0.05	03/30/20 23:00	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:38	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:38	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:00	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:00	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0039		*	mg/L	0.0001	0.0005	03/31/20 13:38	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.0931			mg/L	0.0005	0.002	03/31/20 13:38	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:38	enb

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB206\_175-182 ACZ Sample ID: L57215-02

Date Sampled: 01/23/20 14:00

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	8.9		units	0.1	0.1	03/21/20 17:45	gkh
Temperature		1	20.1		С	0.1	0.1	03/21/20 17:45	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.4		units	0.1	0.1	02/21/20 13:00	nnk
Temperature		1	22.8		С	0.1	0.1	02/21/20 13:00	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/21/20 0:00	gkh
Extraction pH		1	4.91		units			03/21/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/21/20 0:00	gkh
Extraction Time		1	56		hrs			03/21/20 0:00	gkh
Leachate Volume		1	4888.4		mL			03/21/20 0:00	gkh
Particle Size over 5		1	0		%			03/21/20 0:00	gkh
cm									
Post Filter pH		1	8.76		units			03/21/20 0:00	gkh
Pre Filter pH		1	8.89		units			03/21/20 0:00	gkh
Retained Moisture			0						SREV
Temperature		1	20.1		С	0.1	0.1	03/21/20 0:00	gkh
Time In		1						03/21/20 0:00	gkh
Time Out		1						03/21/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

D516-07 - Turbidimetric

Wood - E&I Solutions, Inc.

Project ID:

Sulfate (MWMT)

Sample ID: WRSB206\_175-182

ACZ Sample ID: **L57215-02** 

Date Sampled: 01/23/20 14:00

25

03/27/20 11:49

wtc

Date Received: 02/03/20

Sample Matrix: Soil

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.0		*	mg/L	2	20	03/27/20 15:05	еер
Carbonate as CaCO3		1	30.4		*	mg/L	2	20	03/27/20 15:05	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:05	еер
Total Alkalinity		1	129		*	mg/L	2	20	03/27/20 15:05	еер
Chloride (MWMT)	SM4500CI-E	1	16.7		*	mg/L	0.5	2	03/27/20 10:22	wtc
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:04	mss2
Fluoride (MWMT)	SM4500F-C	1	2.6		*	mg/L	0.1	0.4	04/03/20 11:09	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		2.55	Н		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	2.57	Н	*	mg/L	0.02	0.1	03/26/20 23:37	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	0.02	ВН	*	mg/L	0.01	0.05	03/26/20 23:37	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.3	В	*	mg/L	0.2	0.5	03/28/20 19:36	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C	1	264		*	mg/L	20	40	03/26/20 17:50	jck

41.7

mg/L

<sup>\*</sup> Please refer to Qualifier Reports for details.

Project ID:

Sample ID: WRSB206\_187-192

ACZ Sample ID: **L57215-03** 

Date Sampled: 01/23/20 14:40 Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 13:18	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 10:49	jlw
ICPMS MWMT Prep	M6020B ICP-MS								03/27/20 6:41	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 12:32	rbt
Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.06	В	*	mg/L	0.05	0.3	03/30/20 23:03	jlw
Antimony (MWMT)	M6020B ICP-MS	1	0.0012	В	*	mg/L	0.0004	0.002	03/31/20 13:41	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0311			mg/L	0.0002	0.001	03/31/20 13:41	enb
Barium (MWMT)	M6010D ICP	1	0.027	В	*	mg/L	0.007	0.04	03/30/20 23:03	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:41	enb
Boron (MWMT)	M6010D ICP	1	0.66			mg/L	0.02	0.1	03/30/20 23:03	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:41	enb
Calcium (MWMT)	M6010D ICP	1	19.3		*	mg/L	0.1	0.5	03/30/20 23:03	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:41	enb
Cobalt (MWMT)	M6020B ICP-MS	1	0.00019	В	*	mg/L	0.00005	0.0003	03/31/20 13:41	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0242		*	mg/L	0.0008	0.002	03/31/20 13:41	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:03	jlw
Lead (MWMT)	M6020B ICP-MS	1	0.0004	В	*	mg/L	0.0001	0.0005	03/31/20 13:41	enb
Lithium (MWMT)	M6010D ICP	1	0.028	В	*	mg/L	0.008	0.04	03/30/20 23:03	jlw
Magnesium (MWMT)	M6010D ICP	1	2.4		*	mg/L	0.2	1	03/30/20 23:03	jlw
Manganese (MWMT)	M6020B ICP-MS	1	0.0073		*	mg/L	0.0004	0.002	03/31/20 13:41	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:32	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.124		*	mg/L	0.0002	0.0005	03/31/20 13:41	enb
Nickel (MWMT)	M6020B ICP-MS	1	0.0023		*	mg/L	0.0004	0.001	03/31/20 13:41	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 23:03	jlw
Potassium (MWMT)	M6010D ICP	1	6.3		*	mg/L	0.2	1	03/30/20 23:03	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.001		*	mg/L	0.0001	0.0003	04/01/20 9:04	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:41	enb
Sodium (MWMT)	M6010D ICP	1	138			mg/L	0.2	1	03/30/20 23:03	jlw
Strontium (MWMT)	M6010D ICP	1	0.210		*	mg/L	0.009	0.05	03/30/20 23:03	jlw
Thallium (MWMT)	M6020B ICP-MS	1	< 0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:41	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:41	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:03	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:03	jlw
							0 0004		00/04/00 40 44	

REPIN.02.06.05.01

Uranium (MWMT)

Vanadium (MWMT)

Zinc (MWMT)

M6020B ICP-MS

M6020B ICP-MS

M6020B ICP-MS

0.0005 03/31/20 13:41

03/31/20 13:41

03/31/20 13:41

0.002

0.02

enb

enb

enb

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В

0.0065

0.0554

0.006

mg/L

mg/L

mg/L

0.0001

0.0005

0.006

1

1

1

<sup>\*</sup> Please refer to Qualifier Reports for details.

03/21/20 0:00

03/21/20 0:00

03/21/20 0:00

03/21/20 0:00

03/21/20 0:00

03/21/20 0:00

03/21/20 0:00

03/21/20 0:00

gkh

gkh

gkh

gkh

gkh

gkh

gkh

gkh

**SREV** 



Wood - E&I Solutions, Inc.

Project ID:

**Extraction Time** 

Post Filter pH

Pre Filter pH

Temperature

Time In

Time Out

cm

Leachate Volume

Particle Size over 5

Retained Moisture

Sample ID: WRSB206\_187-192

Date Sampled: 01/23/20 14:40

Date Received: 02/03/20 Sample Matrix: Soil

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	8.8		units	0.1	0.1	03/21/20 17:45	gkh
Temperature		1	20.1		С	0.1	0.1	03/21/20 17:45	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.7		units	0.1	0.1	02/21/20 13:04	nnk
Temperature		1	22.8		С	0.1	0.1	02/21/20 13:04	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/21/20 0:00	gkh
Extraction pH		1	4.91		units			03/21/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/21/20 0:00	gkh

56

4777.9

0

8.78

8.83

0

20.1

hrs

mL

%

units

units

С

0.1

0.1

1

1

1

1

1

1

1

1

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

D516-07 - Turbidimetric

Wood - E&I Solutions, Inc.

Project ID:

Sulfate (MWMT)

Sample ID: WRSB206\_187-192

ACZ Sample ID: **L57215-03** 

Date Sampled: 01/23/20 14:40

25

03/27/20 11:49

wtc

Date Received: 02/03/20

Sample Matrix: Soil

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	97.1		*	mg/L	2	20	03/27/20 15:14	еер
Carbonate as CaCO3		1	11.3	В	*	mg/L	2	20	03/27/20 15:14	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:14	eep
Total Alkalinity		1	108		*	mg/L	2	20	03/27/20 15:14	eep
Chloride (MWMT)	SM4500CI-E	1	30.6		*	mg/L	0.5	2	03/27/20 10:22	wtc
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:05	mss2
Fluoride (MWMT)	SM4500F-C	1	3.2		*	mg/L	0.1	0.4	04/03/20 11:12	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		<0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	03/26/20 23:39	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	03/26/20 23:39	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.3	В	*	mg/L	0.2	0.5	03/28/20 19:37	pjb
Residue, Filterable (TDS) @180C (MWMT)	SM2540C )	1	500		*	mg/L	20	40	03/26/20 17:53	jck

196

mg/L

Project ID:

Sample ID: WRSB206\_197-202

ACZ Sample ID: **L57215-04** 

Date Sampled: 01/27/20 15:02

Date Received: 02/03/20

Sample Matrix: Soil

ı	noi	rga	nic	Pr	ep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 13:35	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 11:17	jlw
ICPMS MWMT Prep	M6020B ICP-MS								03/27/20 7:10	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 12:57	rbt

## Metals Analysis

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	03/30/20 23:07	jlw
Antimony (MWMT)	M6020B ICP-MS	1	0.0013	В	*	mg/L	0.0004	0.002	03/31/20 13:44	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0196			mg/L	0.0002	0.001	03/31/20 13:44	enb
Barium (MWMT)	M6010D ICP	1	0.032	В	*	mg/L	0.007	0.04	03/30/20 23:07	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:44	enb
Boron (MWMT)	M6010D ICP	1	0.52			mg/L	0.02	0.1	03/30/20 23:07	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:44	enb
Calcium (MWMT)	M6010D ICP	1	19.4		*	mg/L	0.1	0.5	03/30/20 23:07	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:44	enb
Cobalt (MWMT)	M6020B ICP-MS	1	0.00011	В	*	mg/L	0.00005	0.0003	03/31/20 13:44	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0036		*	mg/L	0.0008	0.002	03/31/20 13:44	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:07	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:44	enb
Lithium (MWMT)	M6010D ICP	1	0.031	В	*	mg/L	0.008	0.04	03/30/20 23:07	jlw
Magnesium (MWMT)	M6010D ICP	1	1.8		*	mg/L	0.2	1	03/30/20 23:07	jlw
Manganese (MWMT)	M6020B ICP-MS	1	0.0053		*	mg/L	0.0004	0.002	03/31/20 13:44	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:33	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.141		*	mg/L	0.0002	0.0005	03/31/20 13:44	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:44	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 23:07	jlw
Potassium (MWMT)	M6010D ICP	1	8.4		*	mg/L	0.2	1	03/30/20 23:07	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0003		*	mg/L	0.0001	0.0003	04/01/20 9:06	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:44	enb
Sodium (MWMT)	M6010D ICP	1	145			mg/L	0.2	1	03/30/20 23:07	jlw
Strontium (MWMT)	M6010D ICP	1	0.185		*	mg/L	0.009	0.05	03/30/20 23:07	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:44	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:44	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:07	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:07	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0028		*	mg/L	0.0001	0.0005	03/31/20 13:44	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.037			mg/L	0.0005	0.002	03/31/20 13:44	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:44	enb

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB206\_197-202

Date Sampled: 01/27/20 15:02

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	8.4		units	0.1	0.1	03/21/20 17:45	gkh
Temperature		1	20.0		С	0.1	0.1	03/21/20 17:45	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	8.8		units	0.1	0.1	02/21/20 13:09	nnk
Temperature		1	22.3		С	0.1	0.1	02/21/20 13:09	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/21/20 0:00	gkh
Extraction pH		1	4.91		units			03/21/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/21/20 0:00	gkh
Extraction Time		1	56		hrs			03/21/20 0:00	gkh
Leachate Volume		1	3970.6		mL			03/21/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/21/20 0:00	gkh
Post Filter pH		1	8.46		units			03/21/20 0:00	gkh
Pre Filter pH		1	8.42		units			03/21/20 0:00	gkh
Retained Moisture			0						SREV
Temperature		1	20.0		С	0.1	0.1	03/21/20 0:00	gkh
Time In		1						03/21/20 0:00	gkh
Time Out		1						03/21/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB206\_197-202

ACZ Sample ID: **L57215-04** 

Date Sampled: 01/27/20 15:02

Date Received: 02/03/20

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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as		1	76.8		*	mg/L	2	20	03/27/20 15:22	еер
CaCO3										
Carbonate as CaCO3		1	3.9	В	*	mg/L	2	20	03/27/20 15:22	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:22	еер
Total Alkalinity		1	80.6		*	mg/L	2	20	03/27/20 15:22	еер
Chloride (MWMT)	SM4500CI-E	10	137		*	mg/L	5	20	03/27/20 10:42	wtc
Cyanide, WAD	SM4500-CN I,E-	0.5	< 0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:06	mss2
(MWMT)	Colorimetric w/ distillation									
Fluoride (MWMT)	SM4500F-C	1	2.9		*	mg/L	0.1	0.4	04/03/20 11:15	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		0.17	Н		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated	1	0.34	Н	*	mg/L	0.02	0.1	03/26/20 23:40	pjb
(MWMT)	Cadmium Reduction									
Nitrite as N (MWMT)	M353.2 - Automated	1	0.17	Н	*	mg/L	0.01	0.05	03/26/20 23:40	pjb
	Cadmium Reduction			_	*				00/00/00 40 00	
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.4	В	*	mg/L	0.2	0.5	03/28/20 19:38	pjb
Residue, Filterable	SM2540C	1	492		*	mg/L	20	40	03/26/20 17:56	jck
(TDS) @180C (MWMT	)									-
Sulfate (MWMT)	D516-07 - Turbidimetric	5	106		*	mg/L	5	25	03/27/20 11:49	wtc



Project ID:

Sample ID: WRSB207\_0.5-3

ACZ Sample ID: **L57215-05** 

Date Sampled: 01/22/20 09:18

Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date 1	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 13:52	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 11:45	jlw
ICPMS MWMT Prep	M6020B ICP-MS				*				03/27/20 7:38	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 13:21	rbt
Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date 1	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	03/30/20 23:11	jlw
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:48	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0282			mg/L	0.0002	0.001	03/31/20 13:48	enb
Barium (MWMT)	M6010D ICP	1	0.010	В	*	mg/L	0.007	0.04	03/30/20 23:11	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:48	enb
Boron (MWMT)	M6010D ICP	1	0.14			mg/L	0.02	0.1	03/30/20 23:11	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:48	enb
Calcium (MWMT)	M6010D ICP	1	5.4		*	mg/L	0.1	0.5	03/30/20 23:11	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:48	enb
Cobalt (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:48	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0039		*	mg/L	0.0008	0.002	03/31/20 13:48	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:11	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:48	enb
Lithium (MWMT)	M6010D ICP	1	0.010	В	*	mg/L	0.008	0.04	03/30/20 23:11	jlw
Magnesium (MWMT)	M6010D ICP	1	1.0		*	mg/L	0.2	1	03/30/20 23:11	jlw
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:48	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:34	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0132		*	mg/L	0.0002	0.0005	03/31/20 13:48	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:48	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 23:11	jlw
Potassium (MWMT)	M6010D ICP	1	2.0		*	mg/L	0.2	1	03/30/20 23:11	jlw
Selenium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0003	04/01/20 9:07	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:48	enb
Sodium (MWMT)	M6010D ICP	1	11.1			mg/L	0.2	1	03/30/20 23:11	jlw
Strontium (MWMT)	M6010D ICP	1	0.055		*	mg/L	0.009	0.05	03/30/20 23:11	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:48	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:48	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:11	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:11	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0019		*	mg/L	0.0001	0.0005	03/31/20 13:48	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.0222			mg/L	0.0005	0.002	03/31/20 13:48	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:48	enb

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_0.5-3

ACZ Sample ID: **L57215-05** 

Date Sampled: 01/22/20 09:18

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	8.2		units	0.1	0.1	03/20/20 13:20	gkh
Temperature		1	20.1		С	0.1	0.1	03/20/20 13:20	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.6		units	0.1	0.1	02/21/20 13:14	nnk
Temperature		1	22.1		С	0.1	0.1	02/21/20 13:14	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000	*	g			03/20/20 0:00	gkh
Extraction pH		1	4.91	*	units			03/20/20 0:00	gkh
Extraction Temperature		1	23.0	*	С	0.1	0.1	03/20/20 0:00	gkh
Extraction Time		1	27.58333	*	hrs			03/20/20 0:00	gkh
Leachate Volume		1	5012	*	mL			03/20/20 0:00	gkh
Particle Size over 5 cm		1	0	*	%			03/20/20 0:00	gkh
Post Filter pH		1	8.33	*	units			03/20/20 0:00	gkh
Pre Filter pH		1	8.17	*	units			03/20/20 0:00	gkh
Retained Moisture		1	8.87	*	%			03/20/20 0:00	gkh
Temperature		1	20.1	*	С	0.1	0.1	03/20/20 0:00	gkh
Time In		1		*				03/20/20 0:00	gkh
Time Out		1		*				03/20/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_0.5-3 ACZ Sample ID: L57215-05

Date Sampled: 01/22/20 09:18

Date Received: 02/03/20 Sample Matrix: Soil

Wet Chemistry

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as		1	36.5		*	mg/L	2	20	03/27/20 15:33	еер
CaCO3										
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:33	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:33	eep
Total Alkalinity		1	37.8		*	mg/L	2	20	03/27/20 15:33	еер
Chloride (MWMT)	SM4500CI-E	1	8.0	В	*	mg/L	0.5	2	03/27/20 10:22	wtc
Cyanide, WAD	SM4500-CN I,E-	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:07	mss2
(MWMT)	Colorimetric w/ distillation									
Fluoride (MWMT)	SM4500F-C	1	1.2		*	mg/L	0.1	0.4	04/03/20 11:18	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		< 0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated	1	<0.02	UH	*	mg/L	0.02	0.1	03/26/20 23:41	pjb
(MWMT)	Cadmium Reduction									
Nitrite as N (MWMT)	M353.2 - Automated	1	<0.01	UH	*	mg/L	0.01	0.05	03/26/20 23:41	pjb
	Cadmium Reduction					_				
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	03/28/20 19:39	pjb
Residue, Filterable	SM2540C	1	62		*	mg/L	20	40	03/26/20 17:59	jck
(TDS) @180C (MWMT	)									
Sulfate (MWMT)	D516-07 - Turbidimetric	1	4.9	В	*	mg/L	1	5	03/27/20 11:42	wtc

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Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_6-15

ACZ Sample ID: **L57215-06** 

Date Sampled: 01/22/20 09:38

Date Received: 02/03/20

Sample Matrix: Soil

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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 14:09	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 12:13	jlw
ICPMS MWMT Prep	M6020B ICP-MS								03/27/20 8:07	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 13:46	rbt

## Metals Analysis

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.05	В	*	mg/L	0.05	0.3	03/30/20 23:15	jlw
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:51	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0222			mg/L	0.0002	0.001	03/31/20 13:51	enb
Barium (MWMT)	M6010D ICP	1	0.010	В	*	mg/L	0.007	0.04	03/30/20 23:15	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:51	enb
Boron (MWMT)	M6010D ICP	1	0.15			mg/L	0.02	0.1	03/30/20 23:15	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:51	enb
Calcium (MWMT)	M6010D ICP	1	6.7		*	mg/L	0.1	0.5	03/30/20 23:15	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:51	enb
Cobalt (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:51	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0026		*	mg/L	0.0008	0.002	03/31/20 13:51	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:15	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:51	enb
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	03/30/20 23:15	jlw
Magnesium (MWMT)	M6010D ICP	1	1.3		*	mg/L	0.2	1	03/30/20 23:15	jlw
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:51	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:35	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0232		*	mg/L	0.0002	0.0005	03/31/20 13:51	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:51	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 23:15	jlw
Potassium (MWMT)	M6010D ICP	1	2.0		*	mg/L	0.2	1	03/30/20 23:15	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0004		*	mg/L	0.0001	0.0003	04/01/20 9:09	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:51	enb
Sodium (MWMT)	M6010D ICP	1	17.1			mg/L	0.2	1	03/30/20 23:15	jlw
Strontium (MWMT)	M6010D ICP	1	0.068		*	mg/L	0.009	0.05	03/30/20 23:15	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:51	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:51	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:15	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:15	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0007		*	mg/L	0.0001	0.0005	03/31/20 13:51	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.0149			mg/L	0.0005	0.002	03/31/20 13:51	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:51	enb

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_6-15 ACZ Sample ID: L57215-06

Date Sampled: 01/22/20 09:38

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pH		1	8.2		units	0.1	0.1	03/20/20 13:05	gkh
Temperature		1	20.9		С	0.1	0.1	03/20/20 13:05	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.5		units	0.1	0.1	02/21/20 13:18	nnk
Temperature		1	21.8		С	0.1	0.1	02/21/20 13:18	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/20/20 0:00	gkh
Extraction pH		1	4.91		units			03/20/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/20/20 0:00	gkh
Extraction Time		1	27.41667		hrs			03/20/20 0:00	gkh
Leachate Volume		1	5004.8		mL			03/20/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/20/20 0:00	gkh
Post Filter pH		1	8.23		units			03/20/20 0:00	gkh
Pre Filter pH		1	8.19		units			03/20/20 0:00	gkh
Retained Moisture		1	10.25		%			03/20/20 0:00	gkh
Temperature		1	20.9		С	0.1	0.1	03/20/20 0:00	gkh
Time In		1						03/20/20 0:00	gkh
Time Out		1						03/20/20 0:00	gkh



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Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_6-15

ACZ Sample ID: **L57215-06** 

Date Sampled: 01/22/20 09:38

Date Received: 02/03/20

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	32.1		*	mg/L	2	20	03/27/20 15:42	еер
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:42	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:42	еер
Total Alkalinity		1	32.1		*	mg/L	2	20	03/27/20 15:42	еер
Chloride (MWMT)	SM4500CI-E	1	3.0		*	mg/L	0.5	2	03/27/20 10:22	wtc
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:09	mss2
Fluoride (MWMT)	SM4500F-C	1	0.9		*	mg/L	0.1	0.4	04/03/20 11:21	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		<0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	03/26/20 23:43	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	03/26/20 23:43	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	03/28/20 19:40	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	92		*	mg/L	20	40	03/26/20 18:01	jck
Sulfate (MWMT)	D516-07 - Turbidimetric	1	25.1		*	mg/L	1	5	03/27/20 11:42	wtc

Project ID:

Sample ID: WRSB207\_25-35

ACZ Sample ID: **L57215-07** 

Date Sampled: 01/22/20 10:02

Date Received: 02/03/20 Sample Matrix: Soil

Inorganic I	Prep
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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 14:26	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 12:41	jlw
ICPMS MWMT Prep	M6020B ICP-MS				*				03/27/20 8:36	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 14:10	rbt

### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.05	В	*	mg/L	0.05	0.3	03/30/20 23:19	jlw
Antimony (MWMT)	M6020B ICP-MS	1	0.0005	В	*	mg/L	0.0004	0.002	03/31/20 14:00	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0177			mg/L	0.0002	0.001	03/31/20 14:00	enb
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	03/30/20 23:19	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 14:00	enb
Boron (MWMT)	M6010D ICP	1	0.16			mg/L	0.02	0.1	03/30/20 23:19	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 14:00	enb
Calcium (MWMT)	M6010D ICP	1	8.2		*	mg/L	0.1	0.5	03/30/20 23:19	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 14:00	enb
Cobalt (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 14:00	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0027		*	mg/L	0.0008	0.002	03/31/20 14:00	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:19	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 14:00	enb
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	03/30/20 23:19	jlw
Magnesium (MWMT)	M6010D ICP	1	1.6		*	mg/L	0.2	1	03/30/20 23:19	jlw
Manganese (MWMT)	M6020B ICP-MS	1	0.0009	В	*	mg/L	0.0004	0.002	03/31/20 14:00	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:36	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0418		*	mg/L	0.0002	0.0005	03/31/20 14:00	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 14:00	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 23:19	jlw
Potassium (MWMT)	M6010D ICP	1	4.5		*	mg/L	0.2	1	03/30/20 23:19	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0006		*	mg/L	0.0001	0.0003	04/01/20 9:15	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 14:00	enb
Sodium (MWMT)	M6010D ICP	1	19.4			mg/L	0.2	1	03/30/20 23:19	jlw
Strontium (MWMT)	M6010D ICP	1	0.077		*	mg/L	0.009	0.05	03/30/20 23:19	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 14:00	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 14:00	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:19	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:19	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0006		*	mg/L	0.0001	0.0005	03/31/20 14:00	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.0108			mg/L	0.0005	0.002	03/31/20 14:00	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 14:00	enb

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_25-35

ACZ Sample ID: **L57215-07** 

Date Sampled: 01/22/20 10:02

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	8.2		units	0.1	0.1	03/20/20 14:45	gkh
Temperature		1	20.0		С	0.1	0.1	03/20/20 14:45	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	8.4		units	0.1	0.1	02/21/20 13:23	nnk
Temperature		1	21.4		С	0.1	0.1	02/21/20 13:23	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000	*	g			03/20/20 0:00	gkh
Extraction pH		1	4.91	*	units			03/20/20 0:00	gkh
Extraction Temperature		1	23.0	*	С	0.1	0.1	03/20/20 0:00	gkh
Extraction Time		1	29	*	hrs			03/20/20 0:00	gkh
Leachate Volume		1	5001.5	*	mL			03/20/20 0:00	gkh
Particle Size over 5 cm		1	0	*	%			03/20/20 0:00	gkh
Post Filter pH		1	8.3	*	units			03/20/20 0:00	gkh
Pre Filter pH		1	8.22	*	units			03/20/20 0:00	gkh
Retained Moisture		1	13.25	*	%			03/20/20 0:00	gkh
Temperature		1	20.0	*	С	0.1	0.1	03/20/20 0:00	gkh
Time In		1		*				03/20/20 0:00	gkh
Time Out		1		*				03/20/20 0:00	gkh



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Cadmium Reduction

M353.2 - Automated

Cadmium Reduction

D516-07 - Turbidimetric

Nitrogen, total Kjeldahl M351.2 - Block Digestor

SM2540C

Wood - E&I Solutions, Inc.

Project ID:

Wet Chemistry

(MWMT)

(MWMT)

Nitrite as N (MWMT)

Residue, Filterable

(TDS) @180C (MWMT) Sulfate (MWMT)

Sample ID: WRSB207\_25-35

ACZ Sample ID: **L57215-07** 

Date Sampled: 01/22/20 10:02

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Quai	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	35.4		*	mg/L	2	20	03/27/20 15:51	еер
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:51	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 15:51	еер
Total Alkalinity		1	35.4		*	mg/L	2	20	03/27/20 15:51	еер
Chloride (MWMT)	SM4500CI-E	1	5.4		*	mg/L	0.5	2	03/27/20 10:22	. wtc
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:10	mss2
Fluoride (MWMT)	SM4500F-C	1	1.5		*	mg/L	0.1	0.4	04/03/20 11:25	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		< 0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated	1	< 0.02	UH	*	mg/L	0.02	0.1	03/26/20 23:44	pjb

UH

U

mg/L

mg/L

mg/L

mg/L

0.01

0.2

20

1

0.05

0.5

40

5

03/26/20 23:44

03/28/20 19:44

03/26/20 18:04

03/27/20 11:42

pjb

pjb

jck

wtc

< 0.01

<0.2

108

29.8

1

1

1

Project ID:

Sample ID: WRSB207\_65-75 ACZ Sample ID: L57215-08

Date Sampled: 01/22/20 11:03 Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				03/27/20 14:43	mss2
ICP MWMT Prep	M6010D ICP								03/27/20 13:09	jlw
ICPMS MWMT Prep	M6020B ICP-MS								03/27/20 9:05	enb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				03/27/20 14:35	rbt
Madala Amakasia										

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	< 0.05	U	*	mg/L	0.05	0.3	03/30/20 23:23	jlw
Antimony (MWMT)	M6020B ICP-MS	1	0.0008	В	*	mg/L	0.0004	0.002	03/31/20 14:03	enb
Arsenic (MWMT)	M6020B ICP-MS	1	0.0794			mg/L	0.0002	0.001	03/31/20 14:03	enb
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	03/30/20 23:23	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 14:03	enb
Boron (MWMT)	M6010D ICP	1	0.57			mg/L	0.02	0.1	03/30/20 23:23	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 14:03	enb
Calcium (MWMT)	M6010D ICP	1	4.2		*	mg/L	0.1	0.5	03/30/20 23:23	jlw
Chromium (MWMT)	M6020B ICP-MS	1	0.0005	В	*	mg/L	0.0005	0.002	03/31/20 14:03	enb
Cobalt (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 14:03	enb
Copper (MWMT)	M6020B ICP-MS	1	0.0053		*	mg/L	0.0008	0.002	03/31/20 14:03	enb
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	03/30/20 23:23	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 14:03	enb
Lithium (MWMT)	M6010D ICP	1	0.009	В	*	mg/L	0.008	0.04	03/30/20 23:23	jlw
Magnesium (MWMT)	M6010D ICP	1	0.6	В	*	mg/L	0.2	1	03/30/20 23:23	jlw
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 14:03	enb
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/27/20 13:38	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0348		*	mg/L	0.0002	0.0005	03/31/20 14:03	enb
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 14:03	enb
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	03/30/20 23:23	jlw
Potassium (MWMT)	M6010D ICP	1	1.1		*	mg/L	0.2	1	03/30/20 23:23	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0005		*	mg/L	0.0001	0.0003	04/01/20 9:17	enb
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 14:03	enb
Sodium (MWMT)	M6010D ICP	1	70.9			mg/L	0.2	1	03/30/20 23:23	jlw
Strontium (MWMT)	M6010D ICP	1	0.048	В	*	mg/L	0.009	0.05	03/30/20 23:23	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 14:03	enb
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 14:03	enb
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	03/30/20 23:23	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	03/30/20 23:23	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0024		*	mg/L	0.0001	0.0005	03/31/20 14:03	enb
Vanadium (MWMT)	M6020B ICP-MS	1	0.232			mg/L	0.0005	0.002	03/31/20 14:03	enb
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 14:03	enb

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_65-75 ACZ Sample ID: L57215-08

Date Sampled: 01/22/20 11:03

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	9.0		units	0.1	0.1	03/20/20 13:55	gkh
Temperature		1	20.1		С	0.1	0.1	03/20/20 13:55	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	9.2		units	0.1	0.1	02/21/20 13:27	nnk
Temperature		1	20.7		С	0.1	0.1	02/21/20 13:27	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/20/20 0:00	gkh
Extraction pH		1	4.91		units			03/20/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/20/20 0:00	gkh
Extraction Time		1	28.16667		hrs			03/20/20 0:00	gkh
Leachate Volume		1	5011.7		mL			03/20/20 0:00	gkh
Particle Size over 5		1	0		%			03/20/20 0:00	gkh
cm									
Post Filter pH		1	9.02		units			03/20/20 0:00	gkh
Pre Filter pH		1	9.04		units			03/20/20 0:00	gkh
Retained Moisture		1	15.73		%			03/20/20 0:00	gkh
Temperature		1	20.1		С	0.1	0.1	03/20/20 0:00	gkh
Time In		1						03/20/20 0:00	gkh
Time Out		1						03/20/20 0:00	gkh



Project ID:

Sample ID: WRSB207\_65-75 ACZ Sample ID: L57215-08

Date Sampled: 01/22/20 11:03

Date Received: 02/03/20

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	88.4		*	mg/L	2	20	03/27/20 16:00	еер
Carbonate as CaCO3		1	24.7		*	mg/L	2	20	03/27/20 16:00	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/27/20 16:00	еер
Total Alkalinity		1	113		*	mg/L	2	20	03/27/20 16:00	еер
Chloride (MWMT)	SM4500CI-E	1	9.6		*	mg/L	0.5	2	03/27/20 10:23	wtc
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	03/27/20 16:11	mss2
Fluoride (MWMT)	SM4500F-C	1	3.4		*	mg/L	0.1	0.4	04/03/20 11:28	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		< 0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	03/26/20 23:54	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	03/26/20 23:54	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	03/28/20 19:45	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	226		*	mg/L	20	40	03/26/20 18:07	jck
Sulfate (MWMT)	D516-07 - Turbidimetric	5	31.7		*	mg/L	5	25	03/27/20 11:40	wtc

Project ID:

Sample ID: WRSB207\_105-115

ACZ Sample ID: **L57215-09** 

Date Sampled: 01/22/20 13:37 Date Received: 02/03/20

Sample Matrix: Soil

Inorganic F	rep?
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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:13	3 wtc
ICP MWMT Prep	M6010D ICP								03/31/20 10:13	B kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 15:32	2 mfm
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/06/20 11:15	5 rbt

### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.15	В	*	mg/L	0.05	0.3	04/01/20 14:48	kja
Antimony (MWMT)	M6020B ICP-MS	1	0.0011	В	*	mg/L	0.0004	0.002	03/31/20 12:47	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0816		*	mg/L	0.0002	0.001	03/31/20 12:47	mfm
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	04/01/20 14:48	kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	80000.0	0.0003	03/31/20 12:47	mfm
Boron (MWMT)	M6010D ICP	1	0.57			mg/L	0.02	0.1	04/01/20 14:48	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 12:47	mfm
Calcium (MWMT)	M6010D ICP	1	3.4			mg/L	0.1	0.5	04/01/20 14:48	kja
Chromium (MWMT)	M6020B ICP-MS	1	0.0006	В	*	mg/L	0.0005	0.002	03/31/20 12:47	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.00005	0.0003	03/31/20 12:47	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0076		*	mg/L	0.0008	0.002	03/31/20 12:47	mfm
Iron (MWMT)	M6010D ICP	1	0.11	В	*	mg/L	0.06	0.2	04/01/20 14:48	kja
Lead (MWMT)	M6020B ICP-MS	1	0.0001	В	*	mg/L	0.0001	0.0005	03/31/20 12:47	mfm
Lithium (MWMT)	M6010D ICP	1	0.009	В	*	mg/L	0.008	0.04	04/01/20 14:48	kja
Magnesium (MWMT)	M6010D ICP	1	0.6	В	*	mg/L	0.2	1	04/01/20 14:48	kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0021		*	mg/L	0.0004	0.002	03/31/20 12:47	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 16:58	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0444		*	mg/L	0.0002	0.0005	03/31/20 12:47	mfm
Nickel (MWMT)	M6020B ICP-MS	1	0.0004	В	*	mg/L	0.0004	0.001	03/31/20 12:47	mfm
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	04/01/20 14:48	kja
Potassium (MWMT)	M6010D ICP	1	1.8		*	mg/L	0.2	1	04/01/20 14:48	kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0004		*	mg/L	0.0001	0.0003	03/31/20 12:47	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:47	mfm
Sodium (MWMT)	M6010D ICP	1	74.0		*	mg/L	0.2	1	04/01/20 14:48	kja
Strontium (MWMT)	M6010D ICP	1	0.031	В	*	mg/L	0.009	0.05	04/01/20 14:48	kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:47	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 12:47	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 14:48	kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 14:48	kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0055		*	mg/L	0.0001	0.0005	03/31/20 12:47	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.291		*	mg/L	0.0005	0.002	03/31/20 12:47	mfm
Zinc (MWMT)	M6020B ICP-MS	1	0.010	В	*	mg/L	0.006	0.02	03/31/20 12:47	mfm

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_105-115

ACZ Sample ID: **L57215-09** 

Date Sampled: 01/22/20 13:37

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								,
рН		1	9.0		units	0.1	0.1	03/25/20 12:34	gkh
Temperature		1	21.1		С	0.1	0.1	03/25/20 12:34	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	9.1		units	0.1	0.1	02/21/20 13:37	nnk
Temperature		1	22.4		С	0.1	0.1	02/21/20 13:37	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000	*	g			03/25/20 0:00	gkh
Extraction pH		1	5.01	*	units			03/25/20 0:00	gkh
Extraction Temperature		1	23.0	*	С	0.1	0.1	03/25/20 0:00	gkh
Extraction Time		1	31	*	hrs			03/25/20 0:00	gkh
Leachate Volume		1	5001.7	*	mL			03/25/20 0:00	gkh
Particle Size over 5		1	0	*	%			03/25/20 0:00	gkh
cm									
Post Filter pH		1	9.05	*	units			03/25/20 0:00	gkh
Pre Filter pH		1	9.03	*	units			03/25/20 0:00	gkh
Retained Moisture		1	18.26	*	%			03/25/20 0:00	gkh
Temperature		1	21.1	*	С	0.1	0.1	03/25/20 0:00	gkh
Time In		1		*				03/25/20 0:00	gkh
Time Out		1		*				03/25/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Wood - E&I Solutions, Inc.

Project ID:

Wet Chemistry

Sample ID: WRSB207\_105-115 ACZ Sample ID: L57215-09

Date Sampled: 01/22/20 13:37

Date Received: 02/03/20

Parameter	EPA Method	Dilution	Result	Quai	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	105		*	mg/L	2	20	03/30/20 11:59	emk
Carbonate as CaCO3		1	38.3		*	mg/L	2	20	03/30/20 11:59	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 11:59	emk
Total Alkalinity		1	143		*	mg/L	2	20	03/30/20 11:59	emk
Chloride (MWMT)	SM4500CI-E	1	7.5		*	mg/L	0.5	2	03/30/20 17:48	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:31	pjb
Fluoride (MWMT)	SM4500F-C	1	3.9		*	mg/L	0.1	0.4	04/08/20 11:25	emk
	0 1 1 1 1 1001100 1 1100									

Project ID:

Sample ID: WRSB207\_125-135 ACZ Sample ID: L57215-10

Date Sampled: 01/22/20 14:58

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:18	3 wtc
ICP MWMT Prep	M6010D ICP								03/31/20 10:42	2 kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 15:54	4 mfm
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/06/20 11:40	) rbt

### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.18	В	*	mg/L	0.05	0.3	04/01/20 14:52	kja
Antimony (MWMT)	M6020B ICP-MS	1	0.001	В	*	mg/L	0.0004	0.002	03/31/20 12:49	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.085		*	mg/L	0.0002	0.001	03/31/20 12:49	mfm
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	04/01/20 14:52	kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 12:49	mfm
Boron (MWMT)	M6010D ICP	1	0.74			mg/L	0.02	0.1	04/01/20 14:52	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 12:49	mfm
Calcium (MWMT)	M6010D ICP	1	1.2			mg/L	0.1	0.5	04/01/20 14:52	kja
Chromium (MWMT)	M6020B ICP-MS	1	0.0011	В	*	mg/L	0.0005	0.002	03/31/20 12:49	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00017	В	*	mg/L	0.00005	0.0003	03/31/20 12:49	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0067		*	mg/L	0.0008	0.002	03/31/20 12:49	mfm
Iron (MWMT)	M6010D ICP	1	0.14	В	*	mg/L	0.06	0.2	04/01/20 14:52	kja
Lead (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0005	03/31/20 12:49	mfm
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	04/01/20 14:52	kja
Magnesium (MWMT)	M6010D ICP	1	0.2	В	*	mg/L	0.2	1	04/01/20 14:52	kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0028		*	mg/L	0.0004	0.002	03/31/20 12:49	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 16:59	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0598		*	mg/L	0.0002	0.0005	03/31/20 12:49	mfm
Nickel (MWMT)	M6020B ICP-MS	1	0.0005	В	*	mg/L	0.0004	0.001	03/31/20 12:49	mfm
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	04/01/20 14:52	kja
Potassium (MWMT)	M6010D ICP	1	1.3		*	mg/L	0.2	1	04/01/20 14:52	kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0003		*	mg/L	0.0001	0.0003	03/31/20 12:49	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:49	mfm
Sodium (MWMT)	M6010D ICP	1	80.0		*	mg/L	0.2	1	04/01/20 14:52	kja
Strontium (MWMT)	M6010D ICP	1	0.009	В	*	mg/L	0.009	0.05	04/01/20 14:52	kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:49	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 12:49	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 14:52	kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 14:52	kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0086		*	mg/L	0.0001	0.0005	03/31/20 12:49	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.262		*	mg/L	0.0005	0.002	03/31/20 12:49	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 12:49	mfm

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_125-135

ACZ Sample ID: **L57215-10** 

Date Sampled: 01/22/20 14:58

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	9.1		units	0.1	0.1	03/25/20 18:17	gkh
Temperature		1	20.3		С	0.1	0.1	03/25/20 18:17	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	9.2		units	0.1	0.1	02/21/20 13:41	nnk
Temperature		1	22.0		С	0.1	0.1	02/21/20 13:41	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/25/20 0:00	gkh
Extraction pH		1	5.01		units			03/25/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/25/20 0:00	gkh
Extraction Time		1	56		hrs			03/25/20 0:00	gkh
Leachate Volume		1	4925.7		mL			03/25/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/25/20 0:00	gkh
Post Filter pH		1	8.99		units			03/25/20 0:00	gkh
Pre Filter pH		1	9.07		units			03/25/20 0:00	gkh
Retained Moisture			0						SREV
Temperature		1	20.3		С	0.1	0.1	03/25/20 0:00	gkh
Time In		1						03/25/20 0:00	gkh
Time Out		1						03/25/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_125-135 Date Sampled: 01/22/20 14:58

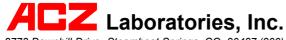
Date Received: 02/03/20

We	t Che	mistry

vvot Onomiotry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as		1	94.0		*	mg/L	2	20	03/30/20 12:08	emk
CaCO3										
Carbonate as CaCO3		1	37.3		*	mg/L	2	20	03/30/20 12:08	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:08	emk
Total Alkalinity		1	131		*	mg/L	2	20	03/30/20 12:08	emk
Chloride (MWMT)	SM4500CI-E	1	12.5		*	mg/L	0.5	2	03/30/20 17:48	krh/rbt
Cyanide, WAD	SM4500-CN I,E-	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:32	pjb
(MWMT)	Colorimetric w/ distillation									
Fluoride (MWMT)	SM4500F-C	1	3.6		*	mg/L	0.1	0.4	04/08/20 11:28	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		0.07	ВН		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N	M353.2 - Automated	1	0.07	ВН	*	mg/L	0.02	0.1	04/01/20 1:27	pjb
(MWMT)	Cadmium Reduction									
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 1:27	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.3	В	*	mg/L	0.2	0.5	04/07/20 23:54	pjb
Residue, Filterable (TDS) @180C (MWMT)	SM2540C )	1	260		*	mg/L	20	40	03/30/20 11:41	nnk/em k
Sulfate (MWMT)	D516-07 - Turbidimetric	1	27.8		*	mg/L	1	5	04/01/20 9:43	wtc

04/06/20 12:05

rbt



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_140-145

Date Sampled: 01/23/20 09:37

Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:23	wtc
ICP MWMT Prep	M6010D ICP								03/31/20 11:11	kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 16:16	mfm

Nitrogen, total Kjeldahl M351.2 - Block Digestor

(MWMT)

Metals	Ana	lysis
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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.11	В	*	mg/L	0.05	0.3	04/01/20 14:56	kja
Antimony (MWMT)	M6020B ICP-MS	1	0.0012	В	*	mg/L	0.0004	0.002	03/31/20 12:51	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0963		*	mg/L	0.0002	0.001	03/31/20 12:51	mfm
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	04/01/20 14:56	kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 12:51	mfm
Boron (MWMT)	M6010D ICP	1	0.59			mg/L	0.02	0.1	04/01/20 14:56	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 12:51	mfm
Calcium (MWMT)	M6010D ICP	1	1.6			mg/L	0.1	0.5	04/01/20 14:56	kja
Chromium (MWMT)	M6020B ICP-MS	1	0.0008	В	*	mg/L	0.0005	0.002	03/31/20 12:51	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00017	В	*	mg/L	0.00005	0.0003	03/31/20 12:51	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0031		*	mg/L	0.0008	0.002	03/31/20 12:51	mfm
Iron (MWMT)	M6010D ICP	1	0.09	В	*	mg/L	0.06	0.2	04/01/20 14:56	kja
Lead (MWMT)	M6020B ICP-MS	1	0.0001	В	*	mg/L	0.0001	0.0005	03/31/20 12:51	mfm
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	04/01/20 14:56	kja
Magnesium (MWMT)	M6010D ICP	1	0.3	В	*	mg/L	0.2	1	04/01/20 14:56	kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0021		*	mg/L	0.0004	0.002	03/31/20 12:51	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 17:00	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0577		*	mg/L	0.0002	0.0005	03/31/20 12:51	mfm
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 12:51	mfm
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	04/01/20 14:56	kja
Potassium (MWMT)	M6010D ICP	1	1.7		*	mg/L	0.2	1	04/01/20 14:56	kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0003		*	mg/L	0.0001	0.0003	03/31/20 12:51	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:51	mfm
Sodium (MWMT)	M6010D ICP	1	91.2		*	mg/L	0.2	1	04/01/20 14:56	kja
Strontium (MWMT)	M6010D ICP	1	0.015	В	*	mg/L	0.009	0.05	04/01/20 14:56	kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:51	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 12:51	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 14:56	kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 14:56	kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0117		*	mg/L	0.0001	0.0005	03/31/20 12:51	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.259		*	mg/L	0.0005	0.002	03/31/20 12:51	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 12:51	mfm

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_140-145 ACZ Sample ID: L57215-11

Date Sampled: 01/23/20 09:37

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pH		1	9.2		units	0.1	0.1	03/25/20 23:59	gkh
Temperature		1	20.1		С	0.1	0.1	03/25/20 23:59	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	9.2		units	0.1	0.1	02/21/20 13:46	nnk
Temperature		1	22.1		С	0.1	0.1	02/21/20 13:46	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/25/20 0:00	gkh
Extraction pH		1	5.01		units			03/25/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/25/20 0:00	gkh
Extraction Time		1	56		hrs			03/25/20 0:00	gkh
Leachate Volume		1	5059.2		mL			03/25/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/25/20 0:00	gkh
Post Filter pH		1	8.98		units			03/25/20 0:00	gkh
Pre Filter pH		1	9.15		units			03/25/20 0:00	gkh
Retained Moisture			0						SREV
Temperature		1	20.1		С	0.1	0.1	03/25/20 0:00	gkh
Time In		1						03/25/20 0:00	gkh
Time Out		1						03/25/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_140-145 ACZ Sample ID: L57215-11

Date Sampled: 01/23/20 09:37

Date Received: 02/03/20

Sample Matrix: Soil

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	118		*	mg/L	2	20	03/30/20 12:17	emk
Carbonate as CaCO3		1	30.0		*	mg/L	2	20	03/30/20 12:17	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:17	emk
Total Alkalinity		1	148		*	mg/L	2	20	03/30/20 12:17	emk
Chloride (MWMT)	SM4500CI-E	1	20.6		*	mg/L	0.5	2	03/30/20 17:48	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:33	pjb
Fluoride (MWMT)	SM4500F-C	1	4.3		*	mg/L	0.1	0.4	04/08/20 11:31	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		0.03	ВН		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	0.03	ВН	*	mg/L	0.02	0.1	04/01/20 1:28	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 1:28	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.3	В	*	mg/L	0.2	0.5	04/07/20 23:56	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	282		*	mg/L	20	40	03/30/20 11:46	nnk/em k
Sulfate (MWMT)	D516-07 - Turbidimetric	1	37.5		*	mg/L	1	5	04/01/20 9:43	wtc

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Project ID:

Sample ID: WRSB207\_150-155

ACZ Sample ID: *L57215-12* 

Date Sampled: 01/23/20 09:40

Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:28	8 wtc
ICP MWMT Prep	M6010D ICP								03/31/20 11:40	) kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 16:38	3 mfm
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/06/20 12:30	) rbt
Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst

iviciais Arialysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	< 0.05	U	*	mg/L	0.05	0.3	04/01/20 14:59	kja
Antimony (MWMT)	M6020B ICP-MS	1	0.0011	В	*	mg/L	0.0004	0.002	03/31/20 12:53	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0672		*	mg/L	0.0002	0.001	03/31/20 12:53	mfm
Barium (MWMT)	M6010D ICP	1	0.011	В	*	mg/L	0.007	0.04	04/01/20 14:59	kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 12:53	mfm
Boron (MWMT)	M6010D ICP	1	0.85			mg/L	0.02	0.1	04/01/20 14:59	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 12:53	mfm
Calcium (MWMT)	M6010D ICP	1	11.8			mg/L	0.1	0.5	04/01/20 14:59	kja
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 12:53	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00041		*	mg/L	0.00005	0.0003	03/31/20 12:53	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0197		*	mg/L	0.0008	0.002	03/31/20 12:53	mfm
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	04/01/20 14:59	kja
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:53	mfm
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	04/01/20 14:59	kja
Magnesium (MWMT)	M6010D ICP	1	1.5		*	mg/L	0.2	1	04/01/20 14:59	kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0012	В	*	mg/L	0.0004	0.002	03/31/20 12:53	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 17:01	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0518		*	mg/L	0.0002	0.0005	03/31/20 12:53	mfm
Nickel (MWMT)	M6020B ICP-MS	1	0.0016		*	mg/L	0.0004	0.001	03/31/20 12:53	mfm
Phosphorus (MWMT)	M6010D ICP	1	0.3	В	*	mg/L	0.1	0.5	04/01/20 14:59	kja
Potassium (MWMT)	M6010D ICP	1	1.9		*	mg/L	0.2	1	04/01/20 14:59	kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0008		*	mg/L	0.0001	0.0003	03/31/20 12:53	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:53	mfm
Sodium (MWMT)	M6010D ICP	1	113		*	mg/L	0.2	1	04/01/20 14:59	kja
Strontium (MWMT)	M6010D ICP	1	0.116		*	mg/L	0.009	0.05	04/01/20 14:59	kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:53	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 12:53	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 14:59	kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 14:59	kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0084		*	mg/L	0.0001	0.0005	03/31/20 12:53	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.212		*	mg/L	0.0005	0.002	03/31/20 12:53	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 12:53	mfm

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB207\_150-155

Date Sampled: 01/23/20 09:40

Date Received: 02/03/20

Soil Analysis		<b>D</b> II 41		0 1 70					
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	8.9		units	0.1	0.1	03/26/20 5:42	gkh
Temperature		1	20.4		С	0.1	0.1	03/26/20 5:42	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	9.1		units	0.1	0.1	02/21/20 13:51	nnk
Temperature		1	21.6		С	0.1	0.1	02/21/20 13:51	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/25/20 0:00	gkh
Extraction pH		1	5.01		units			03/25/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/25/20 0:00	gkh
Extraction Time		1	48		hrs			03/25/20 0:00	gkh
Leachate Volume		1	4967.6		mL			03/25/20 0:00	gkh
Particle Size over 5		1	0		%			03/25/20 0:00	gkh
cm									_
Post Filter pH		1	8.93		units			03/25/20 0:00	gkh
Pre Filter pH		1	8.85		units			03/25/20 0:00	gkh
Retained Moisture		1	18.40		%			03/25/20 0:00	gkh
Temperature		1	20.4		С	0.1	0.1	03/25/20 0:00	gkh
Time In		1						03/25/20 0:00	gkh
Time Out		1						03/25/20 0:00	gkh



Project ID:

Sample ID: WRSB207\_150-155 Date Sampled: 01/23/20 09:40

Date Received: 02/03/20

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	108		*	mg/L	2	20	03/30/20 12:26	emk
Carbonate as CaCO3		1	39.1		*	mg/L	2	20	03/30/20 12:26	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:26	emk
Total Alkalinity		1	148		*	mg/L	2	20	03/30/20 12:26	emk
Chloride (MWMT)	SM4500CI-E	1	29.6		*	mg/L	0.5	2	03/30/20 17:48	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:33	pjb
Fluoride (MWMT)	SM4500F-C	1	3.6		*	mg/L	0.1	0.4	04/08/20 11:34	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		8.6	Н		mg/L	0.1	0.5	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	5	8.6	Н	*	mg/L	0.1	0.5	04/01/20 1:41	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	0.01	ВН	*	mg/L	0.01	0.05	04/01/20 1:29	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.9		*	mg/L	0.2	0.5	04/07/20 23:57	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	414		*	mg/L	20	40	03/30/20 11:51	nnk/em k
Sulfate (MWMT)	D516-07 - Turbidimetric	5	60.9		*	mg/L	5	25	04/01/20 10:08	wtc

Project ID:

Sample ID: WRSB234\_0.5-3

ACZ Sample ID: **L57215-13** 

Date Sampled: 01/23/20 11:38

Date Received: 02/03/20 Sample Matrix: Soil

	I	norgan	ic	Prep
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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:34	4 wtc
ICP MWMT Prep	M6010D ICP								03/31/20 12:08	3 kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 17:00	) mfm
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/06/20 12:55	5 rbt

#### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	04/01/20 15:03	kja
Antimony (MWMT)	M6020B ICP-MS	1	0.0004	В	*	mg/L	0.0004	0.002	03/31/20 12:54	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0187		*	mg/L	0.0002	0.001	03/31/20 12:54	mfm
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	04/01/20 15:03	kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 12:54	mfm
Boron (MWMT)	M6010D ICP	1	0.31			mg/L	0.02	0.1	04/01/20 15:03	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 12:54	mfm
Calcium (MWMT)	M6010D ICP	1	4.2			mg/L	0.1	0.5	04/01/20 15:03	kja
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 12:54	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00019	В	*	mg/L	0.00005	0.0003	03/31/20 12:54	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0087		*	mg/L	0.0008	0.002	03/31/20 12:54	mfm
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	04/01/20 15:03	kja
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:54	mfm
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	04/01/20 15:03	kja
Magnesium (MWMT)	M6010D ICP	1	0.9	В	*	mg/L	0.2	1	04/01/20 15:03	kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0011	В	*	mg/L	0.0004	0.002	03/31/20 12:54	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 17:02	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.119		*	mg/L	0.0002	0.0005	03/31/20 12:54	mfm
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 12:54	mfm
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	04/01/20 15:03	kja
Potassium (MWMT)	M6010D ICP	1	0.7	В	*	mg/L	0.2	1	04/01/20 15:03	kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0003	03/31/20 12:54	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:54	mfm
Sodium (MWMT)	M6010D ICP	1	21.8		*	mg/L	0.2	1	04/01/20 15:03	kja
Strontium (MWMT)	M6010D ICP	1	0.036	В	*	mg/L	0.009	0.05	04/01/20 15:03	kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 12:54	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 12:54	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 15:03	kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 15:03	kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0009		*	mg/L	0.0001	0.0005	03/31/20 12:54	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.0265		*	mg/L	0.0005	0.002	03/31/20 12:54	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 12:54	mfm

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB234\_0.5-3 ACZ Sample ID: L57215-13

Date Sampled: 01/23/20 11:38

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pH		1	7.8		units	0.1	0.1	03/26/20 11:25	gkh
Temperature		1	20.2		С	0.1	0.1	03/26/20 11:25	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	8.4		units	0.1	0.1	02/21/20 13:55	nnk
Temperature		1	20.8		С	0.1	0.1	02/21/20 13:55	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/25/20 0:00	gkh
Extraction pH		1	5.01		units			03/25/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/25/20 0:00	gkh
Extraction Time		1	28.83333		hrs			03/25/20 0:00	gkh
Leachate Volume		1	5006.6		mL			03/25/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/25/20 0:00	gkh
Post Filter pH		1	7.84		units			03/25/20 0:00	gkh
Pre Filter pH		1	7.76		units			03/25/20 0:00	gkh
Retained Moisture		1	19.25		%			03/25/20 0:00	gkh
Temperature		1	20.2		С	0.1	0.1	03/25/20 0:00	gkh
Time In		1						03/25/20 0:00	gkh
Time Out		1						03/25/20 0:00	gkh



Project ID:

Sample ID: WRSB234\_0.5-3 ACZ Sample ID: L57215-13

Date Sampled: 01/23/20 11:38

Date Received: 02/03/20

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	32.7		*	mg/L	2	20	03/30/20 12:36	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:36	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:36	emk
Total Alkalinity		1	32.7		*	mg/L	2	20	03/30/20 12:36	emk
Chloride (MWMT)	SM4500CI-E	1	5.6		*	mg/L	0.5	2	03/30/20 17:48	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:34	pjb
Fluoride (MWMT)	SM4500F-C	1	2.8		*	mg/L	0.1	0.4	04/08/20 11:37	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		<0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	04/01/20 1:31	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 1:31	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	0.2	В	*	mg/L	0.2	0.5	04/07/20 23:58	pjb
Residue, Filterable (TDS) @180C (MWMT)	SM2540C )	1	110		*	mg/L	20	40	03/30/20 11:56	nnk/em k
Sulfate (MWMT)	D516-07 - Turbidimetric	1	20.0		*	mg/L	1	5	04/01/20 9:43	wtc

Date

04/02/20 15:44

03/31/20 14:03

03/30/20 18:28

04/06/20 14:10

Analyst

kja

rbt

mfm



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Wood - E&I Solutions, Inc.

Project ID:

Ingraphic Prop

Sample ID: WRSB234\_6-15

ACZ Sample ID: L57215-14

Date Sampled: 01/23/20 12:00

Date Received: 02/03/20

MDL PQL

Sample Matrix: Soil

Units

morganic r rep						
Parameter	EPA Method	Dilution	Result	Qual	XQ	
Cyanide, WAD	SM4500-CN I		-		*	

(MWMT) Prep
ICP MWMT Prep M6010D ICP

ICPMS MWMT Prep M6020B ICP-MS
Nitrogen, total Kjeldahl M351.2 - Block Digestor

(MWMT)

()										
Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	04/01/20 15:27	kja
Antimony (MWMT)	M6020B ICP-MS	1	0.0004	В	*	mg/L	0.0004	0.002	03/31/20 13:07	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0222		*	mg/L	0.0002	0.001	03/31/20 13:07	mfm
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	04/01/20 15:27	' kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:07	mfm
Boron (MWMT)	M6010D ICP	1	0.16			mg/L	0.02	0.1	04/01/20 15:27	' kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:07	mfm
Calcium (MWMT)	M6010D ICP	1	6.8			mg/L	0.1	0.5	04/01/20 15:27	' kja
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:07	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00007	В	*	mg/L	0.00005	0.0003	03/31/20 13:07	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0037		*	mg/L	0.0008	0.002	03/31/20 13:07	mfm
Iron (MWMT)	M6010D ICP	1	<0.06	U	*	mg/L	0.06	0.2	04/01/20 15:27	' kja
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:07	mfm
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	04/01/20 15:27	' kja
Magnesium (MWMT)	M6010D ICP	1	1.4		*	mg/L	0.2	1	04/01/20 15:27	' kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0005	В	*	mg/L	0.0004	0.002	03/31/20 13:07	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 17:07	' slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.018		*	mg/L	0.0002	0.0005	03/31/20 13:07	mfm
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:07	mfm
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	04/01/20 15:27	' kja
Potassium (MWMT)	M6010D ICP	1	2.8		*	mg/L	0.2	1	04/01/20 15:27	' kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0003		*	mg/L	0.0001	0.0003	03/31/20 13:07	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:07	mfm
Sodium (MWMT)	M6010D ICP	1	17.8		*	mg/L	0.2	1	04/01/20 15:27	' kja
Strontium (MWMT)	M6010D ICP	1	0.065		*	mg/L	0.009	0.05	04/01/20 15:27	' kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:07	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:07	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 15:27	' kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 15:27	' kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0006		*	mg/L	0.0001	0.0005	03/31/20 13:07	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.0215		*	mg/L	0.0005	0.002	03/31/20 13:07	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:07	mfm

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB234\_6-15

Date Sampled: 01/23/20 12:00

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	8.3		units	0.1	0.1	03/26/20 22:51	gkh
Temperature		1	20.4		С	0.1	0.1	03/26/20 22:51	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.5		units	0.1	0.1	02/21/20 14:05	nnk
Temperature		1	19.6		С	0.1	0.1	02/21/20 14:05	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/26/20 0:00	gkh
Extraction pH		1	5.01		units			03/26/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/26/20 0:00	gkh
Extraction Time		1	28.5		hrs			03/26/20 0:00	gkh
Leachate Volume		1	5018.7		mL			03/26/20 0:00	gkh
Particle Size over 5		1	15.19		%			03/26/20 0:00	gkh
cm									
Post Filter pH		1	8.35		units			03/26/20 0:00	gkh
Pre Filter pH		1	8.33		units			03/26/20 0:00	gkh
Retained Moisture		1	12.81		%			03/26/20 0:00	gkh
Temperature		1	20.4		С	0.1	0.1	03/26/20 0:00	gkh
Time In		1						03/26/20 0:00	gkh
Time Out		1						03/26/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



SM2540C

D516-07 - Turbidimetric

Wood - E&I Solutions, Inc.

Project ID:

Wet Chemistry

(MWMT)

Residue, Filterable

(TDS) @180C (MWMT) Sulfate (MWMT)

Sample ID: WRSB234\_6-15

ACZ Sample ID: **L57215-14** 

Date Sampled: 01/23/20 12:00

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	49.4		*	mg/L	2	20	03/30/20 12:54	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:54	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 12:54	emk
Total Alkalinity		1	49.9		*	mg/L	2	20	03/30/20 12:54	emk
Chloride (MWMT)	SM4500CI-E	1	1.8	В	*	mg/L	0.5	2	03/30/20 17:48	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:38	pjb
Fluoride (MWMT)	SM4500F-C	1	1.5		*	mg/L	0.1	0.4	04/08/20 11:49	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		0.67	Н		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	0.67	Н	*	mg/L	0.02	0.1	04/01/20 1:33	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 1:33	pjb
Nitrogen, total Kjeldahl	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	04/08/20 0:03	pjb

1

100

9.7

mg/L

mg/L

20

1

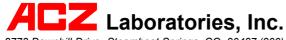
40

5

03/30/20 12:05 nnk/em

wtc

04/01/20 9:45



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB223\_0.5-3

ACZ Sample ID: *L57215-15* 

Date Sampled: 01/23/20 13:35

Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:49	9 wtc
ICP MWMT Prep	M6010D ICP								03/31/20 14:32	2 kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 18:50	0 mfm
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/06/20 14:3	5 rbt

#### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	04/01/20 15:35	kja
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:09	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0209		*	mg/L	0.0002	0.001	03/31/20 13:09	mfm
Barium (MWMT)	M6010D ICP	1	0.007	В	*	mg/L	0.007	0.04	04/01/20 15:35	i kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:09	mfm
Boron (MWMT)	M6010D ICP	1	0.12			mg/L	0.02	0.1	04/01/20 15:35	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:09	mfm
Calcium (MWMT)	M6010D ICP	1	6.0			mg/L	0.1	0.5	04/01/20 15:35	i kja
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:09	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00012	В	*	mg/L	0.00005	0.0003	03/31/20 13:09	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.0925		*	mg/L	0.0008	0.002	03/31/20 13:09	mfm
Iron (MWMT)	M6010D ICP	1	0.10	В	*	mg/L	0.06	0.2	04/01/20 15:35	i kja
Lead (MWMT)	M6020B ICP-MS	1	0.0001	В	*	mg/L	0.0001	0.0005	03/31/20 13:09	mfm
Lithium (MWMT)	M6010D ICP	1	0.019	В	*	mg/L	0.008	0.04	04/01/20 15:35	i kja
Magnesium (MWMT)	M6010D ICP	1	1.1		*	mg/L	0.2	1	04/01/20 15:35	kja
Manganese (MWMT)	M6020B ICP-MS	1	0.0007	В	*	mg/L	0.0004	0.002	03/31/20 13:09	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 17:08	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.006		*	mg/L	0.0002	0.0005	03/31/20 13:09	mfm
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:09	mfm
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	*	mg/L	0.1	0.5	04/01/20 15:35	i kja
Potassium (MWMT)	M6010D ICP	1	2.3		*	mg/L	0.2	1	04/01/20 15:35	i kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0003	03/31/20 13:09	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:09	mfm
Sodium (MWMT)	M6010D ICP	1	5.1		*	mg/L	0.2	1	04/01/20 15:35	i kja
Strontium (MWMT)	M6010D ICP	1	0.053		*	mg/L	0.009	0.05	04/01/20 15:35	i kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:09	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:09	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 15:35	i kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 15:35	i kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0004	В	*	mg/L	0.0001	0.0005	03/31/20 13:09	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.015		*	mg/L	0.0005	0.002	03/31/20 13:09	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:09	mfm

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB223\_0.5-3

ACZ Sample ID: **L57215-15** 

Date Sampled: 01/23/20 13:35

Date Received: 02/03/20 Sample Matrix: Soil

Cail Amahasia									
Soil Analysis Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C	Bilation	rtosuit	Quui AQ	Omio	IIIDE	1 04.5	Duto	Allalyst
pH		1	8.1		units	0.1	0.1	03/27/20 4:34	gkh
Temperature		1	20.6		С	0.1	0.1	03/27/20 4:34	gkh
pH, Corrosivity	M9045D/M9040C								3
pH		1	7.9		units	0.1	0.1	02/21/20 14:09	nnk
Temperature		1	21.3		С	0.1	0.1	02/21/20 14:09	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/26/20 0:00	gkh
Extraction pH		1	5.01		units			03/26/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/26/20 0:00	gkh
Extraction Time		1	29.08333		hrs			03/26/20 0:00	gkh
Leachate Volume		1	5003.7		mL			03/26/20 0:00	gkh
Particle Size over 5 cm		1	14.47		%			03/26/20 0:00	gkh
Post Filter pH		1	8.09		units			03/26/20 0:00	gkh
Pre Filter pH		1	8.09		units			03/26/20 0:00	gkh
Retained Moisture		1	10.66		%			03/26/20 0:00	gkh
Temperature		1	20.6		С	0.1	0.1	03/26/20 0:00	gkh
Time In		1						03/26/20 0:00	gkh
Time Out		1						03/26/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



SM2540C

D516-07 - Turbidimetric

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Wood - E&I Solutions, Inc.

Project ID:

Residue, Filterable

(TDS) @180C (MWMT) Sulfate (MWMT)

Sample ID: WRSB223\_0.5-3

ACZ Sample ID: **L57215-15** 

Date Sampled: 01/23/20 13:35

Date Received: 02/03/20

Sample Matrix: Soil

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	25.1		*	mg/L	2	20	03/30/20 13:02	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 13:02	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 13:02	emk
Total Alkalinity		1	25.1		*	mg/L	2	20	03/30/20 13:02	emk
Chloride (MWMT)	SM4500CI-E	1	8.0	В	*	mg/L	0.5	2	03/30/20 17:49	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:39	pjb
Fluoride (MWMT)	SM4500F-C	1	0.6		*	mg/L	0.1	0.4	04/08/20 11:52	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		< 0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	04/01/20 1:39	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 1:39	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	04/08/20 0:05	pjb

62

8.1

mg/L

mg/L

20

1

40

5

03/30/20 12:10 nnk/em

wtc

04/01/20 9:45

Project ID:

Sample ID: WRSB223\_6-15

ACZ Sample ID: **L57215-16** 

Date Sampled: 01/23/20 13:46 Date Received: 02/03/20

Sample Matrix: Soil

norgan	C	Pre	4

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 15:55	5 wtc
ICP MWMT Prep	M6010D ICP								03/31/20 15:01	l kja
ICPMS MWMT Prep	M6020B ICP-MS								03/30/20 19:12	2 mfm
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/06/20 15:00	) rbt

#### Metals Analysis

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.3	04/01/20 15:39	kja
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:10	mfm
Arsenic (MWMT)	M6020B ICP-MS	1	0.0116		*	mg/L	0.0002	0.001	03/31/20 13:10	mfm
Barium (MWMT)	M6010D ICP	1	<0.007	U	*	mg/L	0.007	0.04	04/01/20 15:39	kja
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.0003	03/31/20 13:10	mfm
Boron (MWMT)	M6010D ICP	1	0.11			mg/L	0.02	0.1	04/01/20 15:39	kja
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.0003	03/31/20 13:10	mfm
Calcium (MWMT)	M6010D ICP	1	1.7			mg/L	0.1	0.5	04/01/20 15:39	kja
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	03/31/20 13:10	mfm
Cobalt (MWMT)	M6020B ICP-MS	1	0.00007	В	*	mg/L	0.00005	0.0003	03/31/20 13:10	mfm
Copper (MWMT)	M6020B ICP-MS	1	0.037		*	mg/L	0.0008	0.002	03/31/20 13:10	mfm
Iron (MWMT)	M6010D ICP	1	0.08	В	*	mg/L	0.06	0.2	04/01/20 15:39	kja
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:10	mfm
Lithium (MWMT)	M6010D ICP	1	<0.008	U	*	mg/L	0.008	0.04	04/01/20 15:39	kja
Magnesium (MWMT)	M6010D ICP	1	0.4	В	*	mg/L	0.2	1	04/01/20 15:39	kja
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	03/31/20 13:10	mfm
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	03/31/20 17:09	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0182		*	mg/L	0.0002	0.0005	03/31/20 13:10	mfm
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	03/31/20 13:10	mfm
Phosphorus (MWMT)	M6010D ICP	1	0.1	В	*	mg/L	0.1	0.5	04/01/20 15:39	kja
Potassium (MWMT)	M6010D ICP	1	0.9	В	*	mg/L	0.2	1	04/01/20 15:39	kja
Selenium (MWMT)	M6020B ICP-MS	1	0.0001	В	*	mg/L	0.0001	0.0003	03/31/20 13:10	mfm
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:10	mfm
Sodium (MWMT)	M6010D ICP	1	7.7		*	mg/L	0.2	1	04/01/20 15:39	kja
Strontium (MWMT)	M6010D ICP	1	0.010	В	*	mg/L	0.009	0.05	04/01/20 15:39	kja
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	03/31/20 13:10	mfm
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	03/31/20 13:10	mfm
Tin (MWMT)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	04/01/20 15:39	kja
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/01/20 15:39	kja
Uranium (MWMT)	M6020B ICP-MS	1	0.0001	В	*	mg/L	0.0001	0.0005	03/31/20 13:10	mfm
Vanadium (MWMT)	M6020B ICP-MS	1	0.0087		*	mg/L	0.0005	0.002	03/31/20 13:10	mfm
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	*	mg/L	0.006	0.02	03/31/20 13:10	mfm

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB223\_6-15

ACZ Sample ID: **L57215-16** 

Date Sampled: 01/23/20 13:46

Date Received: 02/03/20 Sample Matrix: Soil

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	7.9		units	0.1	0.1	03/27/20 10:17	gkh
Temperature		1	20.6		С	0.1	0.1	03/27/20 10:17	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	8.0		units	0.1	0.1	02/21/20 14:14	nnk
Temperature		1	21.3		С	0.1	0.1	02/21/20 14:14	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/27/20 0:00	gkh
Extraction pH		1	5.01		units			03/27/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/27/20 0:00	gkh
Extraction Time		1	29.91667		hrs			03/27/20 0:00	gkh
Leachate Volume		1	5024.3		mL			03/27/20 0:00	gkh
Particle Size over 5 cm		1	0		%			03/27/20 0:00	gkh
Post Filter pH		1	7.84		units			03/27/20 0:00	gkh
Pre Filter pH		1	7.93		units			03/27/20 0:00	gkh
Retained Moisture		1	11.37		%			03/27/20 0:00	gkh
Temperature		1	20.6		С	0.1	0.1	03/27/20 0:00	gkh
Time In		1						03/27/20 0:00	gkh
Time Out		1						03/27/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



M353.2 - Automated

Cadmium Reduction

D516-07 - Turbidimetric

Nitrogen, total Kjeldahl M351.2 - Block Digestor

SM2540C

Wood - E&I Solutions, Inc.

Project ID:

Wet Chemistry

Nitrite as N (MWMT)

Residue, Filterable

(TDS) @180C (MWMT) Sulfate (MWMT)

(MWMT)

Sample ID: WRSB223\_6-15

ACZ Sample ID: *L57215-16* 

Date Sampled: 01/23/20 13:46

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	10.9	В	*	mg/L	2	20	03/30/20 13:10	emk
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 13:10	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	03/30/20 13:10	emk
Total Alkalinity		1	10.9	В	*	mg/L	2	20	03/30/20 13:10	emk
Chloride (MWMT)	SM4500CI-E	1	1.0	В	*	mg/L	0.5	2	03/30/20 17:49	krh/rbt
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:40	pjb
Fluoride (MWMT)	SM4500F-C	1	0.8		*	mg/L	0.1	0.4	04/08/20 11:55	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		<0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	04/01/20 1:40	pjb

UH

U

mg/L

mg/L

mg/L

mg/L

0.01

0.2

20

1

0.05

0.5

40

5

04/01/20 1:40

04/08/20 0:06

04/01/20 9:45

03/30/20 12:15 nnk/em

pjb

pjb

wtc

< 0.01

<0.2

44

9.1

1

1



Project ID:

Sample ID: WRSB228\_0.5-3 Date Sampled: 01/23/20 14:28

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 14:20	0 wtc
ICP MWMT Prep	M6010D ICP								04/01/20 10:28	8 kja
ICPMS MWMT Prep	M6020B ICP-MS								03/31/20 17:57	7 bsu
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/07/20 10:07	7 rbt

## Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual X	Q Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	< 0.05	U	mg/L	0.05	0.3	04/02/20 9:28	jlw
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U	mg/L	0.0004	0.002	04/02/20 17:48	bsu
Arsenic (MWMT)	M6020B ICP-MS	1	0.0192		mg/L	0.0002	0.001	04/02/20 17:48	bsu
Barium (MWMT)	M6010D ICP	1	<0.007	U	mg/L	0.007	0.04	04/02/20 9:28	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U	mg/L	0.00008	0.0003	04/02/20 17:48	bsu
Boron (MWMT)	M6010D ICP	1	0.16	,	t mg/L	0.02	0.1	04/02/20 9:28	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U	mg/L	0.00005	0.0003	04/02/20 17:48	bsu
Calcium (MWMT)	M6010D ICP	1	1.7		mg/L	0.1	0.5	04/02/20 9:28	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U	mg/L	0.0005	0.002	04/02/20 17:48	bsu
Cobalt (MWMT)	M6020B ICP-MS	1	0.00005	В	mg/L	0.00005	0.0003	04/02/20 17:48	bsu
Copper (MWMT)	M6020B ICP-MS	1	0.0037		mg/L	0.0008	0.002	04/02/20 17:48	bsu
Iron (MWMT)	M6010D ICP	1	<0.06	U	mg/L	0.06	0.2	04/02/20 9:28	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U	mg/L	0.0001	0.0005	04/02/20 17:48	bsu
Lithium (MWMT)	M6010D ICP	1	<0.008	U	mg/L	0.008	0.04	04/02/20 9:28	jlw
Magnesium (MWMT)	M6010D ICP	1	0.2	В *	* mg/L	0.2	1	04/02/20 9:28	jlw
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U	mg/L	0.0004	0.002	04/02/20 17:48	bsu
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH '	t mg/L	0.0002	0.001	04/01/20 15:19	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0303	,	t mg/L	0.0002	0.0005	04/02/20 17:48	bsu
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U	mg/L	0.0004	0.001	04/02/20 17:48	bsu
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U	mg/L	0.1	0.5	04/02/20 9:28	jlw
Potassium (MWMT)	M6010D ICP	1	0.9	В ,	t mg/L	0.2	1	04/02/20 9:28	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0002	В ,	t mg/L	0.0001	0.0003	04/02/20 17:48	bsu
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U	mg/L	0.0001	0.0005	04/02/20 17:48	bsu
Sodium (MWMT)	M6010D ICP	1	8.1		mg/L	0.2	1	04/02/20 9:28	jlw
Strontium (MWMT)	M6010D ICP	1	0.017	В	mg/L	0.009	0.05	04/02/20 9:28	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U	mg/L	0.0001	0.0005	04/02/20 17:48	bsu
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U ,	۳ mg/L	0.001	0.005	04/02/20 17:48	bsu
Tin (MWMT)	M6010D ICP	1	<0.04	U	mg/L	0.04	0.2	04/02/20 9:28	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U ,	۳ mg/L	0.005	0.03	04/02/20 9:28	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0002	В ,	t mg/L	0.0001	0.0005	04/02/20 17:48	bsu
Vanadium (MWMT)	M6020B ICP-MS	1	0.0129		mg/L	0.0005	0.002	04/02/20 17:48	bsu
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U	mg/L	0.006	0.02	04/02/20 17:48	bsu

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB228\_0.5-3

ACZ Sample ID: **L57215-17** 

Date Sampled: 01/23/20 14:28

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	7.2		units	0.1	0.1	03/27/20 14:55	gkh
Temperature		1	20.2		С	0.1	0.1	03/27/20 14:55	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	8.4		units	0.1	0.1	02/21/20 14:18	nnk
Temperature		1	20.9		С	0.1	0.1	02/21/20 14:18	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/26/20 0:00	gkh
Extraction pH		1	5.06		units			03/26/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/26/20 0:00	gkh
Extraction Time		1	27.16667		hrs			03/26/20 0:00	gkh
Leachate Volume		1	5022.8		mL			03/26/20 0:00	gkh
Particle Size over 5 cm		1	8.97		%			03/26/20 0:00	gkh
Post Filter pH		1	7.24		units			03/26/20 0:00	gkh
Pre Filter pH		1	7.16		units			03/26/20 0:00	gkh
Retained Moisture		1	4.93		%			03/26/20 0:00	gkh
Temperature		1	20.2		С	0.1	0.1	03/26/20 0:00	gkh
Time In		1						03/26/20 0:00	gkh
Time Out		1						03/26/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.

wtc



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Wood - E&I Solutions, Inc.

Project ID:

Wet Chemistry

Sample ID: WRSB228\_0.5-3 ACZ Sample ID: L57215-17

Date Sampled: 01/23/20 14:28

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	14.6	В	*	mg/L	2	20	04/01/20 11:14	еер
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:14	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:14	еер
Total Alkalinity		1	14.6	В	*	mg/L	2	20	04/01/20 11:14	еер
Chloride (MWMT)	SM4500CI-E	1	0.6	В	*	mg/L	0.5	2	04/02/20 14:24	mss2
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:20	pjb

4.3

1

mg/L

1



Project ID:

Sample ID: WRSB228-FD\_0.5-3

ACZ Sample ID: **L57215-18** 

Date Sampled: 01/23/20 14:30

Date Received: 02/03/20

Sample Matrix: Soil

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 14:31	wtc
ICP MWMT Prep	M6010D ICP								04/01/20 11:53	kja
ICPMS MWMT Prep	M6020B ICP-MS								03/31/20 22:20	bsu
Nitrogen, total Kieldahl	M351.2 - Block Digestor				*				04/07/20 10:52	rbt

# Metals Analysis

(MWMT)

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.18	В		mg/L	0.05	0.3	04/02/20 9:40	jlw
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	04/02/20 18:19	bsu
Arsenic (MWMT)	M6020B ICP-MS	1	0.0129			mg/L	0.0002	0.001	04/02/20 18:19	bsu
Barium (MWMT)	M6010D ICP	1	0.007	В		mg/L	0.007	0.04	04/02/20 9:40	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U		mg/L	0.00008	0.0003	04/02/20 18:19	bsu
Boron (MWMT)	M6010D ICP	1	0.15		*	mg/L	0.02	0.1	04/02/20 9:40	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U		mg/L	0.00005	0.0003	04/02/20 18:19	bsu
Calcium (MWMT)	M6010D ICP	1	1.2			mg/L	0.1	0.5	04/02/20 9:40	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	04/02/20 18:19	bsu
Cobalt (MWMT)	M6020B ICP-MS	1	0.00006	В		mg/L	0.00005	0.0003	04/02/20 18:19	bsu
Copper (MWMT)	M6020B ICP-MS	1	0.0044			mg/L	0.0008	0.002	04/02/20 18:19	bsu
Iron (MWMT)	M6010D ICP	1	0.13	В		mg/L	0.06	0.2	04/02/20 9:40	jlw
Lead (MWMT)	M6020B ICP-MS	1	0.0003	В		mg/L	0.0001	0.0005	04/02/20 18:19	bsu
Lithium (MWMT)	M6010D ICP	1	<0.008	U		mg/L	0.008	0.04	04/02/20 9:40	jlw
Magnesium (MWMT)	M6010D ICP	1	<0.2	U	*	mg/L	0.2	1	04/02/20 9:40	jlw
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	04/02/20 18:19	bsu
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	04/01/20 15:22	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0246		*	mg/L	0.0002	0.0005	04/02/20 18:19	bsu
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.001	04/02/20 18:19	bsu
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U		mg/L	0.1	0.5	04/02/20 9:40	jlw
Potassium (MWMT)	M6010D ICP	1	0.6	В	*	mg/L	0.2	1	04/02/20 9:40	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0003	04/02/20 18:19	bsu
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 18:19	bsu
Sodium (MWMT)	M6010D ICP	1	7.2			mg/L	0.2	1	04/02/20 9:40	jlw
Strontium (MWMT)	M6010D ICP	1	0.014	В		mg/L	0.009	0.05	04/02/20 9:40	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 18:19	bsu
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	04/02/20 18:19	bsu
Tin (MWMT)	M6010D ICP	1	<0.04	U		mg/L	0.04	0.2	04/02/20 9:40	jlw
Titanium (MWMT)	M6010D ICP	1	0.006	В	*	mg/L	0.005	0.03	04/02/20 9:40	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0005	04/02/20 18:19	bsu
Vanadium (MWMT)	M6020B ICP-MS	1	0.0091			mg/L	0.0005	0.002	04/02/20 18:19	bsu
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U		mg/L	0.006	0.02	04/02/20 18:19	bsu

REPIN.02.06.05.01

<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB228-FD\_0.5-3 ACZ Sample ID: L57215-18

Date Sampled: 01/23/20 14:30

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	7.3		units	0.1	0.1	03/27/20 12:45	gkh
Temperature		1	20.2		С	0.1	0.1	03/27/20 12:45	gkh
pH, Corrosivity	M9045D/M9040C								
pН		1	8.5		units	0.1	0.1	02/21/20 14:23	nnk
Temperature		1	20.9		С	0.1	0.1	02/21/20 14:23	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/27/20 0:00	gkh
Extraction pH		1	5.06		units			03/27/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/27/20 0:00	gkh
Extraction Time		1	25		hrs			03/27/20 0:00	gkh
Leachate Volume		1	5001		mL			03/27/20 0:00	gkh
Particle Size over 5 cm		1	3.12		%			03/27/20 0:00	gkh
Post Filter pH		1	7.32		units			03/27/20 0:00	gkh
Pre Filter pH		1	7.27		units			03/27/20 0:00	gkh
Retained Moisture		1	8.55		%			03/27/20 0:00	gkh
Temperature		1	20.2		С	0.1	0.1	03/27/20 0:00	gkh
Time In		1						03/27/20 0:00	gkh
Time Out		1						03/27/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



Cadmium Reduction

D516-07 - Turbidimetric

Nitrogen, total Kjeldahl M351.2 - Block Digestor (MWMT)

SM2540C

Wood - E&I Solutions, Inc.

Project ID:

Wet Chemistry

Residue, Filterable

(TDS) @180C (MWMT) Sulfate (MWMT)

Sample ID: WRSB228-FD\_0.5-3 ACZ Sample ID: L57215-18

Date Sampled: 01/23/20 14:30

Date Received: 02/03/20

Sample Matrix: Soil

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	11.4	В	*	mg/L	2	20	04/01/20 11:22	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:22	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:22	eep
Total Alkalinity		1	11.4	В	*	mg/L	2	20	04/01/20 11:22	eep
Chloride (MWMT)	SM4500CI-E	1	<0.5	U	*	mg/L	0.5	2	04/02/20 14:24	mss2
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:22	pjb
Fluoride (MWMT)	SM4500F-C	1	1.0		*	mg/L	0.1	0.4	04/08/20 12:25	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		< 0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	04/01/20 2:29	pjb
Nitrite as N (MWMT)	M353.2 - Automated	1	< 0.01	UH	*	mg/L	0.01	0.05	04/01/20 2:29	pjb

<0.2

38

3.8

В

В

1

mg/L

mg/L

mg/L

0.2

20

1

0.5

40

5

04/08/20 0:22

04/01/20 10:00

04/01/20 9:45

pjb

nnk

wtc

Project ID:

Sample ID: WRSB228\_6-15

ACZ Sample ID: **L57215-19** 

Date Sampled: 01/23/20 14:44
Date Received: 02/03/20

Sample Matrix: Soil

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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 14:36	6 wtc
ICP MWMT Prep	M6010D ICP								04/01/20 12:21	1 kja
ICPMS MWMT Prep	M6020B ICP-MS								03/31/20 23:47	7 bsu
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor				*				04/07/20 11:15	5 rbt

#### Metals Analysis

iviciais Alialysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.15	В		mg/L	0.05	0.3	04/02/20 9:44	jlw
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	04/02/20 17:53	bsu
Arsenic (MWMT)	M6020B ICP-MS	1	0.0093			mg/L	0.0002	0.001	04/02/20 17:53	bsu
Barium (MWMT)	M6010D ICP	1	0.007	В		mg/L	0.007	0.04	04/02/20 9:44	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U		mg/L	0.00008	0.0003	04/02/20 17:53	bsu
Boron (MWMT)	M6010D ICP	1	0.17		*	mg/L	0.02	0.1	04/02/20 9:44	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U		mg/L	0.00005	0.0003	04/02/20 17:53	bsu
Calcium (MWMT)	M6010D ICP	1	3.6			mg/L	0.1	0.5	04/02/20 9:44	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	04/02/20 17:53	bsu
Cobalt (MWMT)	M6020B ICP-MS	1	0.00012	В		mg/L	0.00005	0.0003	04/02/20 17:53	bsu
Copper (MWMT)	M6020B ICP-MS	1	0.0026			mg/L	0.0008	0.002	04/02/20 17:53	bsu
Iron (MWMT)	M6010D ICP	1	0.10	В		mg/L	0.06	0.2	04/02/20 9:44	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 17:53	bsu
Lithium (MWMT)	M6010D ICP	1	<0.008	U		mg/L	0.008	0.04	04/02/20 9:44	jlw
Magnesium (MWMT)	M6010D ICP	1	0.6	В	*	mg/L	0.2	1	04/02/20 9:44	jlw
Manganese (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	04/02/20 17:53	bsu
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	04/01/20 15:23	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.0483		*	mg/L	0.0002	0.0005	04/02/20 17:53	bsu
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.001	04/02/20 17:53	bsu
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U		mg/L	0.1	0.5	04/02/20 9:44	jlw
Potassium (MWMT)	M6010D ICP	1	1.3		*	mg/L	0.2	1	04/02/20 9:44	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0004		*	mg/L	0.0001	0.0003	04/02/20 17:53	bsu
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 17:53	bsu
Sodium (MWMT)	M6010D ICP	1	13.8			mg/L	0.2	1	04/02/20 9:44	jlw
Strontium (MWMT)	M6010D ICP	1	0.039	В		mg/L	0.009	0.05	04/02/20 9:44	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 17:53	bsu
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	04/02/20 17:53	bsu
Tin (MWMT)	M6010D ICP	1	<0.04	U		mg/L	0.04	0.2	04/02/20 9:44	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/02/20 9:44	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0003	В	*	mg/L	0.0001	0.0005	04/02/20 17:53	bsu
Vanadium (MWMT)	M6020B ICP-MS	1	0.0071			mg/L	0.0005	0.002	04/02/20 17:53	bsu
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U		mg/L	0.006	0.02	04/02/20 17:53	bsu

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB228\_6-15

ACZ Sample ID: **L57215-19** 

Date Sampled: 01/23/20 14:44

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
рН		1	7.4		units	0.1	0.1	03/27/20 14:15	gkh
Temperature		1	20.0		С	0.1	0.1	03/27/20 14:15	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.0		units	0.1	0.1	02/21/20 14:28	nnk
Temperature		1	21.0		С	0.1	0.1	02/21/20 14:28	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000		g			03/27/20 0:00	gkh
Extraction pH		1	5.06		units			03/27/20 0:00	gkh
Extraction Temperature		1	23.0		С	0.1	0.1	03/27/20 0:00	gkh
Extraction Time		1	26.5		hrs			03/27/20 0:00	gkh
Leachate Volume		1	5003.8		mL			03/27/20 0:00	gkh
Particle Size over 5		1	0		%			03/27/20 0:00	gkh
cm									
Post Filter pH		1	7.41		units			03/27/20 0:00	gkh
Pre Filter pH		1	7.35		units			03/27/20 0:00	gkh
Retained Moisture		1	11.92		%			03/27/20 0:00	gkh
Temperature		1	20.0		С	0.1	0.1	03/27/20 0:00	gkh
Time In		1						03/27/20 0:00	gkh
Time Out		1						03/27/20 0:00	gkh



Project ID:

Sample ID: WRSB228\_6-15 ACZ Sample ID: L57215-19

Date Sampled: 01/23/20 14:44

Date Received: 02/03/20

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	17.8	В	*	mg/L	2	20	04/01/20 11:39	еер
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:39	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:39	еер
Total Alkalinity		1	17.8	В	*	mg/L	2	20	04/01/20 11:39	еер
Chloride (MWMT)	SM4500CI-E	1	2.5		*	mg/L	0.5	2	04/02/20 14:24	mss2
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:23	pjb
Fluoride (MWMT)	SM4500F-C	1	1.3		*	mg/L	0.1	0.4	04/08/20 12:28	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		0.07	ВН		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	0.07	ВН	*	mg/L	0.02	0.1	04/01/20 2:32	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 2:32	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	04/08/20 0:23	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	72		*	mg/L	20	40	04/01/20 10:03	nnk
Sulfate (MWMT)	D516-07 - Turbidimetric	1	16.7		*	ma/L	1	5	04/01/20 9:45	wtc



Project ID:

Sample ID: WRSB227\_0.5-3 ACZ Sample ID: L57215-20

Date Sampled: 01/24/20 08:40

Date Received: 02/03/20

Sample Matrix: Soil

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Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD (MWMT) Prep	SM4500-CN I		-		*				04/02/20 14:4	1 wtc
ICP MWMT Prep	M6010D ICP								04/01/20 12:50	) kja
ICPMS MWMT Prep	M6020B ICP-MS								04/01/20 1:15	bsu
Nitrogen, total Kjeldah (MWMT)	M351.2 - Block Digestor				*				04/07/20 11:37	7 rbt

## Metals Analysis

Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum (MWMT)	M6010D ICP	1	0.06	В		mg/L	0.05	0.3	04/02/20 9:48	jlw
Antimony (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	04/02/20 17:55	bsu
Arsenic (MWMT)	M6020B ICP-MS	1	0.0294			mg/L	0.0002	0.001	04/02/20 17:55	bsu
Barium (MWMT)	M6010D ICP	1	<0.007	U		mg/L	0.007	0.04	04/02/20 9:48	jlw
Beryllium (MWMT)	M6020B ICP-MS	1	<0.00008	U		mg/L	0.00008	0.0003	04/02/20 17:55	bsu
Boron (MWMT)	M6010D ICP	1	0.14		*	mg/L	0.02	0.1	04/02/20 9:48	jlw
Cadmium (MWMT)	M6020B ICP-MS	1	<0.00005	U		mg/L	0.00005	0.0003	04/02/20 17:55	bsu
Calcium (MWMT)	M6010D ICP	1	4.2			mg/L	0.1	0.5	04/02/20 9:48	jlw
Chromium (MWMT)	M6020B ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	04/02/20 17:55	bsu
Cobalt (MWMT)	M6020B ICP-MS	1	<0.00005	U		mg/L	0.00005	0.0003	04/02/20 17:55	bsu
Copper (MWMT)	M6020B ICP-MS	1	0.0097			mg/L	0.0008	0.002	04/02/20 17:55	bsu
Iron (MWMT)	M6010D ICP	1	0.06	В		mg/L	0.06	0.2	04/02/20 9:48	jlw
Lead (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 17:55	bsu
Lithium (MWMT)	M6010D ICP	1	<0.008	U		mg/L	0.008	0.04	04/02/20 9:48	jlw
Magnesium (MWMT)	M6010D ICP	1	0.8	В	*	mg/L	0.2	1	04/02/20 9:48	jlw
Manganese (MWMT)	M6020B ICP-MS	1	0.0004	В		mg/L	0.0004	0.002	04/02/20 17:55	bsu
Mercury (MWMT)	M7470A CVAA	1	<0.0002	UH	*	mg/L	0.0002	0.001	04/01/20 15:24	slm
Molybdenum (MWMT)	M6020B ICP-MS	1	0.010		*	mg/L	0.0002	0.0005	04/02/20 17:55	bsu
Nickel (MWMT)	M6020B ICP-MS	1	<0.0004	U		mg/L	0.0004	0.001	04/02/20 17:55	bsu
Phosphorus (MWMT)	M6010D ICP	1	<0.1	U		mg/L	0.1	0.5	04/02/20 9:48	jlw
Potassium (MWMT)	M6010D ICP	1	1.2		*	mg/L	0.2	1	04/02/20 9:48	jlw
Selenium (MWMT)	M6020B ICP-MS	1	0.0003		*	mg/L	0.0001	0.0003	04/02/20 17:55	bsu
Silver (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 17:55	bsu
Sodium (MWMT)	M6010D ICP	1	6.3			mg/L	0.2	1	04/02/20 9:48	jlw
Strontium (MWMT)	M6010D ICP	1	0.046	В		mg/L	0.009	0.05	04/02/20 9:48	jlw
Thallium (MWMT)	M6020B ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/02/20 17:55	bsu
Thorium (MWMT)	M6020B ICP-MS	1	<0.001	U	*	mg/L	0.001	0.005	04/02/20 17:55	bsu
Tin (MWMT)	M6010D ICP	1	<0.04	U		mg/L	0.04	0.2	04/02/20 9:48	jlw
Titanium (MWMT)	M6010D ICP	1	<0.005	U	*	mg/L	0.005	0.03	04/02/20 9:48	jlw
Uranium (MWMT)	M6020B ICP-MS	1	0.0002	В	*	mg/L	0.0001	0.0005	04/02/20 17:55	bsu
Vanadium (MWMT)	M6020B ICP-MS	1	0.0233			mg/L	0.0005	0.002	04/02/20 17:55	bsu
Zinc (MWMT)	M6020B ICP-MS	1	<0.006	U		mg/L	0.006	0.02	04/02/20 17:55	bsu

REPIN.02.06.05.01

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<sup>\*</sup> Please refer to Qualifier Reports for details.



Project ID:

Sample ID: WRSB227\_0.5-3 ACZ Sample ID: L57215-20

Date Sampled: 01/24/20 08:40

Date Received: 02/03/20

Soil Analysis									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
pH (MWMT)	M9045D/M9040C								
pН		1	7.4		units	0.1	0.1	03/27/20 13:40	gkh
Temperature		1	20.0		С	0.1	0.1	03/27/20 13:40	gkh
pH, Corrosivity	M9045D/M9040C								
рН		1	8.2		units	0.1	0.1	02/21/20 14:32	nnk
Temperature		1	20.3		С	0.1	0.1	02/21/20 14:32	nnk
Soil Preparation									
Parameter	EPA Method	Dilution	Result	Qual XQ	Units	MDL	PQL	Date	Analyst
Meteoric Water Mobility Extraction	ASTM E2242-13								
Dry Weight		1	5000	*	g			03/27/20 0:00	gkh
Extraction pH		1	5.06	*	units			03/27/20 0:00	gkh
Extraction Temperature		1	23.0	*	С	0.1	0.1	03/27/20 0:00	gkh
Extraction Time		1	25.91667	*	hrs			03/27/20 0:00	gkh
Leachate Volume		1	5004.5	*	mL			03/27/20 0:00	gkh
Particle Size over 5 cm		1	8.8	*	%			03/27/20 0:00	gkh
Post Filter pH		1	7.49	*	units			03/27/20 0:00	gkh
Pre Filter pH		1	7.43	*	units			03/27/20 0:00	gkh
Retained Moisture		1	10.76	*	%			03/27/20 0:00	gkh
Temperature		1	20.0	*	С	0.1	0.1	03/27/20 0:00	gkh
Time In		1		*				03/27/20 0:00	gkh
Time Out		1		*				03/27/20 0:00	gkh

<sup>\*</sup> Please refer to Qualifier Reports for details.



2113 Downiniii Drive Steamboat Springs, CO 80401 (800) 334-343.

D516-07 - Turbidimetric

Wood - E&I Solutions, Inc.

Project ID:

Sulfate (MWMT)

Sample ID: WRSB227\_0.5-3

ACZ Sample ID: **L57215-20** 

Date Sampled: 01/24/20 08:40

5

04/01/20 9:45

wtc

Date Received: 02/03/20

Sample Matrix: Soil

Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity (MWMT)	SM2320B - Titration									
Bicarbonate as CaCO3		1	16.6	В	*	mg/L	2	20	04/01/20 11:47	еер
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:47	еер
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	04/01/20 11:47	еер
Total Alkalinity		1	16.6	В	*	mg/L	2	20	04/01/20 11:47	еер
Chloride (MWMT)	SM4500CI-E	1	1.2	В	*	mg/L	0.5	2	04/02/20 14:24	mss2
Cyanide, WAD (MWMT)	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	04/04/20 0:24	pjb
Fluoride (MWMT)	SM4500F-C	1	0.9		*	mg/L	0.1	0.4	04/08/20 12:32	emk
Nitrate as N (MWMT)	Calculation: NO3NO2 minus NO2		<0.02	UH		mg/L	0.02	0.1	07/23/20 0:00	calc
Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	04/01/20 2:33	pjb
Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	04/01/20 2:33	pjb
Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	1	<0.2	U	*	mg/L	0.2	0.5	04/08/20 0:24	pjb
Residue, Filterable (TDS) @180C (MWMT	SM2540C )	1	60		*	mg/L	20	40	04/01/20 10:07	nnk

7.3

mg/L

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Report H	 -		
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Batch A distinct set of samples analyzed at a specific time

Found Value of the QC Type of interest Limit Upper limit for RPD, in %.

Lower Recovery Limit, in % (except for LCSS, mg/Kg)

MDL Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5).

Allows for instrument and annual fluctuations.

PCN/SCN A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis

PQL Practical Quantitation Limit. Synonymous with the EPA term "minimum level".

QC True Value of the Control Sample or the amount added to the Spike

Rec Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)

RPD Relative Percent Difference, calculation used for Duplicate QC Types

Upper Upper Recovery Limit, in % (except for LCSS, mg/Kg)

Sample Value of the Sample of interest

QC	Sampl	e Types

AS	Analytical Spike (Post Digestion)	LCSWD	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	LFB	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	LFM	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	LFMD	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	LRB	Laboratory Reagent Blank
ICB	Initial Calibration Blank	MS	Matrix Spike
ICV	Initial Calibration Verification standard	MSD	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	PBS	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	PBW	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	PQV	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	SDL	Serial Dilution

#### QC Sample Type Explanations

Blanks Verifies that there is no or minimal contamination in the prep method or calibration procedure.

Control Samples Verifies the accuracy of the method, including the prep procedure.

Duplicates Verifies the precision of the instrument and/or method. Spikes/Fortified Matrix Determines sample matrix interferences, if any.

Standard Verifies the validity of the calibration.

### ACZ Qualifiers (Qual)

- B Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
- H Analysis exceeded method hold time. pH is a field test with an immediate hold time.
- L Target analyte response was below the laboratory defined negative threshold.
- U The material was analyzed for, but was not detected above the level of the associated value.

The associated value is either the sample quantitation limit or the sample detection limit.

#### **Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples Supplement I, May 1994.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste.
- (5) Standard Methods for the Examination of Water and Wastewater.

#### Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ Extended Qualifiers, please click:

https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Alkalinity as CaCO3** 

SM2320B - Titration

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494501													
WG494501PBW	PBW	03/27/20 14:26				2.6	mg/L		-20	20			
WG494501LCSW1	LCSW	03/27/20 14:39	WC200320-1	820.0001		844	mg/L	103	90	110			
WG493948PBS	PBS	03/27/20 14:48				2	mg/L		-20	20			
L57215-08DUP	DUP	03/27/20 16:09			113	119	mg/L				5	20	
WG494501LCSW2	LCSW	03/27/20 16:22	WC200320-1	820.0001		850	mg/L	104	90	110			
WG494561													
WG494561PBW	PBW	03/30/20 11:28				6.5	mg/L		-20	20			
WG494561LCSW1	LCSW	03/30/20 11:41	WC200320-1	820.0001		848	mg/L	103	90	110			
WG493997PBS	PBS	03/30/20 11:50				2.4	mg/L		-20	20			
L57215-13DUP	DUP	03/30/20 12:45			32.7	45.6	mg/L				33	20	RD
WG494561LCSW2	LCSW	03/30/20 13:23	WC200320-1	820.0001		851	mg/L	104	90	110			
WG494741													
WG494741PBW	PBW	04/01/20 10:43				7.2	mg/L		-20	20			
WG494741LCSW1	LCSW	04/01/20 10:56	WC200320-1	820.0001		850	mg/L	104	90	110			
WG494001PBS	PBS	04/01/20 11:05				U	mg/L		-20	20			
L57215-18DUP	DUP	04/01/20 11:31			11.4	11.4	mg/L				0	20	RA
WG494741LCSW2	LCSW	04/01/20 12:47	WC200320-1	820.0001		833	mg/L	102	90	110			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Aluminum (MWMT)

M6010D ICP

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.987	mg/L	99	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.15	0.15			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.2503		.254	mg/L	101	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	II200302-6	250.3		258.2	mg/L	103	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.15	0.15			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	1.0012		1.014	mg/L	101	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		.995	mg/L	100	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.15	0.15			
L57215-08SDL	SDL	03/30/20 23:35			U	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	1.0012	U	1.099	mg/L	110	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	1.0012	U	1.086	mg/L	108	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			U	.138	mg/L				200	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		.995	mg/L	100	90	110			
WG494597CCB2	CCB	03/30/20 23:54				U	mg/L		-0.15	0.15			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		1.998	mg/L	100	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.15	0.15			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.2503		.221	mg/L	88	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	250.3		252.7	mg/L	101	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.15	0.15			
WG493997LFB1	LFB	04/01/20 14:44	II200302-4	1.0012		.941	mg/L	94	80	120			
L57215-13MS2	MS	04/01/20 15:07	II200302-4	1.0012	U	.975	mg/L	97	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	1.0012	U	.976	mg/L	97	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			U	U	mg/L				0	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		.995	mg/L	100	90	110			
WG494738CCB1	CCB	04/01/20 15:23				U	mg/L		-0.15	0.15			
L57215-14SDL	SDL	04/01/20 15:31			U	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.951	mg/L	95	90	110			
WG494738CCB2	CCB	04/01/20 15:47				U	mg/L		-0.15	0.15			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.987	mg/L	99	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.15	0.15			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.2503		.267	mg/L	107	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	II200302-6	250.3		247.3	mg/L	99	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.15	0.15			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	1.0012		1.006	mg/L	100	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	1.0012	U	1.015	mg/L	101	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	II200302-4	1.0012	U	1.024	mg/L	102	75	125	1	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1		1.006	mg/L	101	90	110			
WG494800CCB1	ССВ	04/02/20 10:03				U	mg/L		-0.15	0.15			
L57217-02SDL	SDL	04/02/20 10:07			U	U	mg/L					10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	1		.994	mg/L	99	90	110			
WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.15	0.15			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Antimony (MWMT)

M6020B ICP-MS

Antimony (MWW)	1)		IVIOUZUB I	ICP-IVIS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.02004		.01889	mg/L	94	90	110			
WG494662ICB	ICB	03/31/20 12:33				.0006	mg/L		-0.0012	0.0012			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.002		.00203	mg/L	102	70	130			
WG494662ICSA	ICSA	03/31/20 12:36				U	mg/L		-0.002	0.002			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.01		.01099	mg/L	110	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0012	0.0012			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.01		.01047	mg/L	105	80	120			
_57215-13SDL	SDL	03/31/20 12:56			.0004	U	mg/L					10	
_57215-13MS1	MS	03/31/20 12:58	MS200120-3	.01	.0004	.01099	mg/L	106	75	125			
_57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.01	.0004	.011	mg/L	106	75	125	0	20	
VG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.0125		.01272	mg/L	102	90	110			
WG494662CCB1	CCB	03/31/20 13:03		.0.20		U	mg/L	.02	-0.0012	0.0012			
L57215-13DUP	DUP	03/31/20 13:05			.0004	.00075	mg/L				61	20	RA
NG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.0125	.000.	.01276	mg/L	102	90	110	٠.		
WG494662CCB2	CCB	03/31/20 13:14		.0120		U	mg/L	.02	-0.0012	0.0012			
	000	30/01/20 13.14				5			-0.0012	0.0012			
NG494534	1017	00/04/00 40 40	M0000040 0	22224		0.1000				440			
VG494534ICV	ICV	03/31/20 13:13	MS200210-2	.02004		.01896	mg/L	95	90	110			
VG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.0012	0.0012			
VG494534PQV	PQV	03/31/20 13:19	MS200327-4	.002		.00195	mg/L	98	70	130			
VG494534ICSA	ICSA	03/31/20 13:23				U	mg/L		-0.002	0.002			
VG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.01		.01027	mg/L	103	80	120			
VG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0012	0.0012			
VG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.0125		.01257	mg/L	101	90	110			
VG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0012	0.0012			
.57215-08SDL	SDL	03/31/20 14:06			.0008	U	mg/L					10	
.57215-08MS1	MS	03/31/20 14:09	MS200120-3	.01	.0008	.01089	mg/L	101	75	125			
.57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.01	.0008	.01092	mg/L	101	75	125	0	20	
-57215-08DUP	DUP	03/31/20 14:15			.0008	.00116	mg/L				37	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.01		.00976	mg/L	98	80	120			
NG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.0125		.01254	mg/L	100	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0012	0.0012			
NG494824													
VG494824ICV	ICV	04/02/20 17:33	MS200331-1	.02004		.01969	mg/L	98	90	110			
/G494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0012	0.0012			
VG494824PQV	PQV	04/02/20 17:37	MS200327-4	.002		.00198	mg/L	99	70	130			
VG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.002	0.002			
VG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.01		.01034	mg/L	103	80	120			
VG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0012	0.0012			
VG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.01		.01018	mg/L	102	80	120			
.57215-17MS1	MS	04/02/20 17:50	MS200120-3	.01	U	.01028	mg/L	103	75	125			
.57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.01	U	.01027	mg/L	103	75	125	0	20	
VG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.0125	-	.01235	mg/L	99	90	110	-	-	
VG494824CCB1	CCB	04/02/20 17:59				U	mg/L		-0.0012	0.0012			
57217-02SDL	SDL	04/02/20 18:04			.0006	U	mg/L					10	
VG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.0125		.01243	mg/L	99	90	110		-	
WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.0012	0.0012			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0012	0.0012			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.01		.01026	mg/L	103	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.0125		.01251	mg/L	100	90	110			
	2/1055			.0120		.0 1201		100	50	110		Pane 6	

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Inorganic QC Summary

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0012 0.0012

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic (MWMT) M6020B ICP-MS

Arsenic (IVIVVIVI I )			1V10U2UB	ICP-IVIS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.04816	mg/L	96	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0006	0.0006			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.001001		.0011	mg/L	110	70	130			
WG494662ICSA	ICSA	03/31/20 12:36		.00025		.00025	mg/L		-0.001	0.001			
	ICSAB	03/31/20 12:38	MS200203-2	.02002		.02132	mg/L	106	80	120			
	PBS	03/31/20 12:44				U	mg/L		-0.0006	0.0006			
	LFB	03/31/20 12:45	MS200120-3	.05005		.04943	mg/L	99	80	120			
_57215-13SDL	SDL	03/31/20 12:56			.0187	.02125	mg/L				14	10	ZH
	MS	03/31/20 12:58	MS200120-3	.05005	.0187	.06964	mg/L	102	75	125			
	MSD	03/31/20 13:00	MS200120-3	.05005	.0187	.07013	mg/L	103	75	125	1	20	
	CCV	03/31/20 13:01	MS200228-5	.1001	.0.0.	.10158	mg/L	101	90	110	•		
	CCB	03/31/20 13:03				U	mg/L		-0.0006	0.0006			
	DUP	03/31/20 13:05			.0187	.03869	mg/L		0.0000	0.0000	70	20	RD
	CCV	03/31/20 13:12	MS200228-5	.1001	.0101	.10028	mg/L	100	90	110	7.0	20	110
WG494662CCB2	CCB	03/31/20 13:14		.1001		U	mg/L	100	-0.0006	0.0006			
	ООВ	00/01/20 10:14				J			-0.0000	0.0000			
WG494534			110000010										
	ICV	03/31/20 13:13	MS200210-2	.05		.04791	mg/L	96	90	110			
	ICB	03/31/20 13:16	140000007.4			U	mg/L		-0.0006	0.0006			
	PQV	03/31/20 13:19	MS200327-4	.001001		.00092	mg/L	92	70	130			
	ICSA	03/31/20 13:23				U	mg/L		-0.001	0.001			
	ICSAB	03/31/20 13:26	MS200203-2	.02002		.01964	mg/L	98	80	120			
	PBS	03/31/20 13:32				U	mg/L		-0.0006	0.0006			
	CCV	03/31/20 13:54	MS200228-5	.1001		.09836	mg/L	98	90	110			
	CCB	03/31/20 13:57				U	mg/L		-0.0006	0.0006			
	SDL	03/31/20 14:06			.0794	.0763	mg/L				4	10	
	MS	03/31/20 14:09	MS200120-3	.05005	.0794	.1261	mg/L	93	75	125			
_57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05005	.0794	.1238	mg/L	89	75	125	2	20	
_57215-08DUP	DUP	03/31/20 14:15			.0794	.08013	mg/L				1	20	
NG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05005		.04771	mg/L	95	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1001		.09931	mg/L	99	90	110			
NG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0006	0.0006			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.04941	mg/L	99	90	110			
VG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0006	0.0006			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.001001		.00096	mg/L	96	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.001	0.001			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02002		.01989	mg/L	99	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0006	0.0006			
NG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05005		.04941	mg/L	99	80	120			
-57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05005	.0192	.06827	mg/L	98	75	125			
	MSD	04/02/20 17:52	MS200120-3	.05005	.0192	.06898	mg/L	99	75	125	1	20	
	CCV	04/02/20 17:57	MS200228-5	.1001	-	.10137	mg/L	101	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.0006	0.0006			
	SDL	04/02/20 18:04			.1083	.1085	mg/L				0	10	
_57217-02SDL				4004		.10264	mg/L	103	90	110	-	-	
		04/02/20 18:12	MS200228-5	.1001									
WG494824CCV2	CCV	04/02/20 18:12 04/02/20 18:13	MS200228-5	.1001			mg/L		-0.0006	0.0006			
WG494824CCV2 WG494824CCB2	CCV CCB	04/02/20 18:13	MS200228-5	.1001		U	mg/L mg/L		-0.0006 -0.0006	0.0006 0.0006			
WG494824CCV2 WG494824CCB2 WG494001PBS	CCV		MS200228-5 MS200120-3	.05005			mg/L mg/L mg/L	101	-0.0006 -0.0006 80	0.0006 0.0006 120			

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2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0006 0.0006

Barium (MWMT)			M6010D	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.963	mg/L	98	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.021	0.021			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.035035		.0365	mg/L	104	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	II200302-6	.25025		.245	mg/L	98	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.021	0.021			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	.5005		.4824	mg/L	96	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		.9852	mg/L	99	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.021	0.021			
L57215-08SDL	SDL	03/30/20 23:35			U	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	.5005	U	.4949	mg/L	99	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	.5005	U	.4893	mg/L	98	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			U	.0117	mg/L				200	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		.9846	mg/L	98	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.021	0.021			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		2.018	mg/L	101	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.021	0.021			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.035035		.0308	mg/L	88	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	.25025		.2461	mg/L	98	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.021	0.021			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	.5005		.4724	mg/L	94	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	.5005	U	.4909	mg/L	98	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	.5005	U	.4912	mg/L	98	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			U	.0098	mg/L				200	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		1.024	mg/L	102	90	110			
WG494738CCB1	CCB	04/01/20 15:23				U	mg/L		-0.021	0.021			
L57215-14SDL	SDL	04/01/20 15:31			U	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.9662	mg/L	97	90	110			
WG494738CCB2	CCB	04/01/20 15:47				U	mg/L		-0.021	0.021			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.941	mg/L	97	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.021	0.021			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.035035		.0399	mg/L	114	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	.25025		.2518	mg/L	101	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.021	0.021			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	.5005		.4871	mg/L	97	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	.5005	U	.4802	mg/L	96	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	.5005	U	.4856	mg/L	97	75	125	1	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1		.9782	mg/L	98	90	110			
WG494800CCB1	ССВ	04/02/20 10:03		•		U	mg/L		-0.021	0.021			
L57217-02SDL	SDL	04/02/20 10:07			.011	U	mg/L					10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	1		.9775	mg/L	98	90	110		-	
WG494800CCB2	CCB	04/02/20 10:27		•		U	mg/L		-0.021	0.021			
		10.E/							J.J.	0.021			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beryllium (MWMT) M6020B ICP-MS

Beryllium (MWM	ІТ)		M6020B	ICP-MS									
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.04811	mg/L	96	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.00024	0.00024			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.00025025		.000247	mg/L	99	70	130			
WG494662ICSA	ICSA	03/31/20 12:36		.00009		.00009	mg/L		-0.0003	0.0003			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02002		.020056	mg/L	100	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.00024	0.00024			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05005		.04909	mg/L	98	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05005	U	.049986	mg/L	100	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05005	U	.04893	mg/L	98	75	125	2	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1001		.102488	mg/L	102	90	110			
WG494662CCB1	CCB	03/31/20 13:03				U	mg/L		-0.00024	0.00024			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.1001		.099942	mg/L	100	90	110			
WG494662CCB2	CCB	03/31/20 13:14				U	mg/L		-0.00024	0.00024			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.04643	mg/L	93	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.00024	0.00024			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.00025025		.000198	mg/L	79	70	130			
WG494534ICSA	ICSA	03/31/20 13:23				U	mg/L		-0.0003	0.0003			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02002		.01894	mg/L	95	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.00024	0.00024			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1001		.1001	mg/L	100	90	110			
WG494534CCB1	ССВ	03/31/20 13:57				U	mg/L		-0.00024	0.00024			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L					10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05005	U	.04843	mg/L	97	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05005	U	.0481	mg/L	96	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			U	U	mg/L				0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05005		.04679	mg/L	93	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1001		.09942	mg/L	99	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.00024	0.00024			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.048725	mg/L	97	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.00024	0.00024			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.00025025		.000286	mg/L	114	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.0003	0.0003			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02002		.020412	mg/L	102	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.00024	0.00024			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05005		.052836	mg/L	106	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05005	U	.050595	mg/L	101	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05005	U	.051408	mg/L	103	75	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1001		.10547	mg/L	105	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.00024	0.00024			
L57217-02SDL	SDL	04/02/20 18:04			U	U	mg/L					10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1001		.107351	mg/L	107	90	110			
WG494824CCB2	ССВ	04/02/20 18:13				U	mg/L		-0.00024	0.00024			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.00024	0.00024			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05005		.051629	mg/L	103	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1001		.107397	mg/L	107	90	110			
L57215-20072	241055										[	Page 7	'0 of 25

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.00024 0.00024

Boron (MWMT)			M6010D	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.982	mg/L	99	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.06	0.06			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.1001		.104	mg/L	104	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	.5005		.497	mg/L	99	80	120			
WG493948PBS	PBS	03/30/20 22:48				.022	mg/L		-0.06	0.06			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	.5005		.523	mg/L	104	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		1.007	mg/L	101	90	110			
WG494597CCB1	ССВ	03/30/20 23:31				U	mg/L		-0.06	0.06			
L57215-08SDL	SDL	03/30/20 23:35			.57	.605	mg/L				6	10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	.5005	.57	1.091	mg/L	104	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	.5005	.57	1.083	mg/L	102	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			.57	.606	mg/L				6	20	
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		1.006	mg/L	101	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.06	0.06			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		2.034	mg/L	102	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.06	0.06			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.1001		.088	mg/L	88	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	.5005		.493	mg/L	99	80	120			
WG493997PBS	PBS	04/01/20 14:40				.032	mg/L		-0.06	0.06			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	.5005		.528	mg/L	105	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	.5005	.31	.831	mg/L	104	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	.5005	.31	.832	mg/L	104	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			.31	.34	mg/L				9	20	
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		.999	mg/L	100	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.06	0.06			
L57215-14SDL	SDL	04/01/20 15:31			.16	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.961	mg/L	96	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.06	0.06			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.989	mg/L	99	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.06	0.06			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.1001		.113	mg/L	113	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	II200302-6	.5005		.503	mg/L	100	80	120			
WG494001PBS	PBS	04/02/20 9:20				.039	mg/L		-0.06	0.06			
WG494001LFB1	LFB	04/02/20 9:24	II200302-4	.5005		.541	mg/L	108	80	120			
L57215-17MS2	MS	04/02/20 9:32	II200302-4	.5005	.16	.66	mg/L	100	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	II200302-4	.5005	.16	.677	mg/L	103	75	125	3	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1		1.002	mg/L	100	90	110			
WG494800CCB1	ССВ	04/02/20 10:03				U	mg/L		-0.06	0.06			
L57217-02SDL	SDL	04/02/20 10:07			.22	.27	mg/L				23	10	ZG
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	1		1.008	mg/L	101	90	110			
WG494800CCB2	ССВ	04/02/20 10:27				U	mg/L		-0.06	0.06			

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium (MWMT) M6020B ICP-MS

Cadmium (MWM	11)		M6020B	ICP-MS									
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.048289	mg/L	97	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.00015	0.00015			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.00025025		.000242	mg/L	97	70	130			
WG494662ICSA	ICSA	03/31/20 12:36		.000238		.000238	mg/L		-0.0003	0.0003			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02002		.020316	mg/L	101	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.00015	0.00015			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05005		.049256	mg/L	98	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05005	U	.049254	mg/L	98	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05005	U	.049295	mg/L	98	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1001		.101275	mg/L	101	90	110			
WG494662CCB1	CCB	03/31/20 13:03				U	mg/L		-0.00015	0.00015			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.1001		.101412	mg/L	101	90	110			
WG494662CCB2	ССВ	03/31/20 13:14				U	mg/L		-0.00015	0.00015			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.04771	mg/L	95	90	110			
WG494534ICB	ICB	03/31/20 13:16	WO200210 2	.03		.04771 U	mg/L	95	-0.00015	0.00015			
WG494534PQV	PQV	03/31/20 13:10	MS200327-4	.00025025		.000216	mg/L	86	70	130			
WG494534PQV WG494534ICSA			W3200327-4					00					
	ICSA	03/31/20 13:23	Meannana a	.000127		.000127	mg/L	0.5	-0.0003	0.0003			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02002		.01893	mg/L	95	80	120			
WG493948PBS	PBS	03/31/20 13:32	M6200220 F	4004		U 4044	mg/L	404	-0.00015	0.00015			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1001		.1011	mg/L	101	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.00015	0.00015		40	
L57215-08SDL	SDL	03/31/20 14:06	M5200420.2	05005	U	U 0407	mg/L	0.7	75	405		10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05005	U	.0487	mg/L	97	75 75	125		00	
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05005	U	.04902	mg/L	98	75	125	1	20	D.4
L57215-08DUP	DUP	03/31/20 14:15	M6200420.2	05005	U	U	mg/L	0.5	00	400	0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05005		.04738	mg/L	95	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1001		.1	mg/L	100	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.00015	0.00015			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.049463	mg/L	99	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.00015	0.00015			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.00025025		.000242	mg/L	97	70	130			
WG494824ICSA	ICSA	04/02/20 17:39		.000101		.000101	mg/L		-0.0003	0.0003			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02002		.019773	mg/L	99	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.00015	0.00015			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05005		.048563	mg/L	97	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05005	U	.047562	mg/L	95	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05005	U	.048669	mg/L	97	75	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1001		.098298	mg/L	98	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.00015	0.00015			
L57217-02SDL	SDL	04/02/20 18:04			U	U	mg/L					10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1001		.099282	mg/L	99	90	110			
WG494824CCB2	ССВ	04/02/20 18:13				U	mg/L		-0.00015	0.00015			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.00015	0.00015			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05005		.049332	mg/L	99	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1001		.098732	mg/L	99	90	110			
L57215-20072											-	2000 7	2 of 25

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.00015 0.00015

Calcium (MWMT	)		M6010D	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	100		100	mg/L	100	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.3	0.3			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.5006		.54	mg/L	108	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	II200302-6	250.3		246.6	mg/L	99	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.3	0.3			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	68.00334		68.47	mg/L	101	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	50		49.25	mg/L	99	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.3	0.3			
L57215-08SDL	SDL	03/30/20 23:35			4.2	4.45	mg/L				6	10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	68.00334	4.2	74.75	mg/L	104	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	68.00334	4.2	73.97	mg/L	103	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			4.2	5.55	mg/L				28	20	RD
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	50		49.61	mg/L	99	90	110			
WG494597CCB2	CCB	03/30/20 23:54				U	mg/L		-0.3	0.3			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	100		100.5	mg/L	101	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.3	0.3			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.5006		.53	mg/L	106	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	II200302-6	250.3		250.7	mg/L	100	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.3	0.3			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	68.00334		65.54	mg/L	96	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	68.00334	4.2	72.74	mg/L	101	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	68.00334	4.2	73.13	mg/L	101	75	125	1	20	
L57215-13DUP	DUP	04/01/20 15:15			4.2	5.09	mg/L				19	20	
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	50		51.07	mg/L	102	90	110			
WG494738CCB1	CCB	04/01/20 15:23				U	mg/L		-0.3	0.3			
L57215-14SDL	SDL	04/01/20 15:31			6.8	7.05	mg/L				4	10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	50		48.33	mg/L	97	90	110			
WG494738CCB2	CCB	04/01/20 15:47				U	mg/L		-0.3	0.3			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	100		100.8	mg/L	101	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.3	0.3			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.5006		.45	mg/L	90	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	250.3		255.8	mg/L	102	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.3	0.3			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	68.00334		71.27	mg/L	105	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	68.00334	1.7	71.35	mg/L	102	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	68.00334	1.7	71.68	mg/L	103	75	125	0	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	50		51.5	mg/L	103	90	110			
WG494800CCB1	CCB	04/02/20 10:03				U	mg/L		-0.3	0.3			
L57217-02SDL	SDL	04/02/20 10:07			19.8	19.9	mg/L				1	10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	50		51.33	mg/L	103	90	110			
WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.3	0.3			

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Chloride (MWMT)

SM4500CI-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494476													
WG494476ICB	ICB	03/27/20 9:57				U	mg/L		-1.5	1.5			
WG494476ICV	ICV	03/27/20 9:57	WI190501-1	54.835		55.66	mg/L	102	90	110			
WG494476CCV1	CCV	03/27/20 10:20	WI200327-1	50.05		52.22	mg/L	104	90	110			
WG494476CCB1	ССВ	03/27/20 10:20				U	mg/L		-1.5	1.5			
WG494476LFB	LFB	03/27/20 10:20	WI200327-3	30.03		32.08	mg/L	107	90	110			
WG493354PBS	PBS	03/27/20 10:20				U	mg/L		-1.5	1.5			
L57101-03AS	AS	03/27/20 10:20	WI200327-3	30.03	.5	33.12	mg/L	109	90	110			
WG494476CCV2	CCV	03/27/20 10:22	WI200327-1	50.05		52.29	mg/L	104	90	110			
WG494476CCB2	ССВ	03/27/20 10:22				U	mg/L		-1.5	1.5			
WG493948PBS	PBS	03/27/20 10:22				U	mg/L		-1.5	1.5			
WG494476CCV3	CCV	03/27/20 10:23	WI200327-1	50.05		52.13	mg/L	104	90	110			
WG494476CCB3	ССВ	03/27/20 10:23				U	mg/L		-1.5	1.5			
WG494476CCV4	CCV	03/27/20 10:23	WI200327-1	50.05		52.19	mg/L	104	90	110			
WG494476CCB4	ССВ	03/27/20 10:23				U	mg/L		-1.5	1.5			
WG494476CCV5	CCV	03/27/20 10:42	WI200327-1	50.05		51.87	mg/L	104	90	110			
WG494476CCB5	ССВ	03/27/20 10:42				U	mg/L		-1.5	1.5			
WG494476CCV6	CCV	03/27/20 10:43	WI200327-1	50.05		52.3	mg/L	104	90	110			
WG494476CCB6	ССВ	03/27/20 10:43				U	mg/L		-1.5	1.5			
WG494616													
WG494616ICB	ICB	03/30/20 15:39				U	mg/L		-1.5	1.5			
WG494616ICV	ICV	03/30/20 15:39	WI200327-1	50.05		54.99	mg/L	110	90	110			
WG494616CCV1	CCV	03/30/20 17:48	WI200327-1	50.05		52.08	mg/L	104	90	110			
WG494616CCB1	CCB	03/30/20 17:48		00.00		U	mg/L		-1.5	1.5			
WG494616LFB	LFB	03/30/20 17:48	WI200327-3	30.03		31.88	mg/L	106	90	110			
WG493997PBS	PBS	03/30/20 17:48		00.00		U	mg/L		-1.5	1.5			
L57215-13AS	AS	03/30/20 17:48	WI200327-3	30.03	5.6	36.88	mg/L	104	90	110			
L57215-13DUP	DUP	03/30/20 17:48			5.6	4.72	mg/L				17	20	
WG494616CCV2	CCV	03/30/20 17:49	WI200327-1	50.05		51.86	mg/L	104	90	110			
WG494616CCB2	ССВ	03/30/20 17:49				U	mg/L		-1.5	1.5			
WG494075PBS	PBS	03/30/20 17:49				U	mg/L		-1.5	1.5			
WG494616CCV3	CCV	03/30/20 17:50	WI200327-1	50.05		52.39	mg/L	105	90	110			
WG494616CCB3	ССВ	03/30/20 17:50				U	mg/L		-1.5	1.5			
WG494616CCV4	CCV	03/30/20 18:03	WI200327-1	50.05		52.13	mg/L	104	90	110			
WG494616CCB4	ССВ	03/30/20 18:03				U	mg/L		-1.5	1.5			
WG494616CCV5	CCV	03/30/20 18:03	WI200327-1	50.05		52.23	mg/L	104	90	110			
WG494616CCB5	ССВ	03/30/20 18:03				U	mg/L		-1.5	1.5			
WG494853													
WG494853ICB	ICB	04/02/20 13:45				U	mg/L		-1.5	1.5			
WG494853ICV	ICV	04/02/20 13:45	WI190501-1	54.835		57.53	mg/L	105	90	110			
WG494853CCV1	CCV	04/02/20 14:24	WI200327-1	50.05		52.38	mg/L	105	90	110			
WG494853CCB1	ССВ	04/02/20 14:24				U	mg/L		-1.5	1.5			
WG494853LFB	LFB	04/02/20 14:24	WI200327-3	30.03		30.88	mg/L	103	90	110			
WG494001PBS	PBS	04/02/20 14:24				U	mg/L		-1.5	1.5			
L57215-17AS	AS	04/02/20 14:24	WI200327-3	30.03	.6	33.61	mg/L	110	90	110			
WG494853CCV2	CCV	04/02/20 14:25	WI200327-1	50.05		52.17	mg/L	104	90	110			
WG494853CCB2	ССВ	04/02/20 14:25				U	mg/L		-1.5	1.5			
WG494853CCV3	CCV	04/02/20 14:25	WI200327-1	50.05		52.44	mg/L	105	90	110			
WG494853CCB3	ССВ	04/02/20 14:25				U	mg/L		-1.5	1.5			
	-					-	-		-	-			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium (MWMT)

M6020B ICP-MS

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.05012	mg/L	100	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0015	0.0015			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.002002		.0019	mg/L	95	70	130			
WG494662ICSA	ICSA	03/31/20 12:36		.002002		U	mg/L	00	-0.002	0.002			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02002		.02023	mg/L	101	80	120			
WG493997PBS	PBS	03/31/20 12:44		.02002		U	mg/L	101	-0.0015	0.0015			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05005		.04908	mg/L	98	80	120			
L57215-13SDL	SDL	03/31/20 12:56		.00000	U	U	mg/L	00	00	120		10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05005	U	.04971	mg/L	99	75	125		10	
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05005	U	.04975	mg/L	99	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:00	MS200228-5	.1001	O	.10139	mg/L	101	90	110	U	20	
WG494662CCB1	CCB	03/31/20 13:01	5255225 5	.1001		. 10133 U	mg/L	101	-0.0015	0.0015			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L		-0.0013	0.0013	0	20	RA
			MS200228-5	1001	U		mg/L	99	90	110	U	20	IVA
WG494662CCV2	CCV	03/31/20 13:12	WIO200220-5	.1001		.0987	mg/L	99		110			
WG494662CCB2	CCB	03/31/20 13:14				U	IIIg/L		-0.0015	0.0015			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.04645	mg/L	93	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.0015	0.0015			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.002002		.00181	mg/L	90	70	130			
WG494534ICSA	ICSA	03/31/20 13:23				U	mg/L		-0.002	0.002			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02002		.01733	mg/L	87	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0015	0.0015			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1001		.09439	mg/L	94	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0015	0.0015			
L57215-08SDL	SDL	03/31/20 14:06			.0005	U	mg/L					10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05005	.0005	.04463	mg/L	88	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05005	.0005	.04476	mg/L	88	75	125	0	20	
L57215-08DUP	DUP	03/31/20 14:15			.0005	.00068	mg/L				31	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05005		.04556	mg/L	91	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1001		.0953	mg/L	95	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0015	0.0015			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05181	mg/L	104	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0015	0.0015			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.002002		.00195	mg/L	97	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.002	0.002			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02002		.01901	mg/L	95	80	120			
WG494001PBS	PBS	04/02/20 17:44		.02002		U	mg/L	00	-0.0015	0.0015			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05005		.04919	mg/L	98	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05005	U	.04833	mg/L	97	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05005	U	.04928	mg/L	98	75 75	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1001	O	.10154	mg/L	101	90	110	2	20	
WG494824CCB1	CCB	04/02/20 17:59	5255225 5	.1001		U	mg/L	101	-0.0015	0.0015			
L57217-02SDL	SDL	04/02/20 17:03			U	U	mg/L		-0.0013	0.0013		10	
WG494824CCV2	CCV		MS200228-5	1001	U	.10154	mg/L	101	90	110		10	
		04/02/20 18:12 04/02/20 18:13	W-200220-0	.1001		.10154 U	mg/L	101	-0.0015				
WG494824CCB2	CCB									0.0015			
WG494001PBS	PBS	04/02/20 18:15	MS200120 2	05005		U 05022	mg/L	400	-0.0015	0.0015			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05005		.05022	mg/L	100	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1001		.09975	mg/L	100	90	110			

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0015 0.0015

Cobalt (MWMT)			M6020B	ICP-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.053376	mg/L	107	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.00015	0.00015			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.00025025		.000245	mg/L	98	70	130			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02002		.020976	mg/L	105	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.00015	0.00015			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05005		.051135	mg/L	102	80	120			
L57215-13SDL	SDL	03/31/20 12:56			.00019	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05005	.00019	.051716	mg/L	103	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05005	.00019	.051917	mg/L	103	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1001		.10464	mg/L	105	90	110			
WG494662CCB1	CCB	03/31/20 13:03				U	mg/L		-0.00015	0.00015			
L57215-13DUP	DUP	03/31/20 13:05			.00019	.000165	mg/L				14	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.1001		.101898	mg/L	102	90	110			
WG494662CCB2	CCB	03/31/20 13:14				U	mg/L		-0.00015	0.00015			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.05092	mg/L	102	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.00015	0.00015			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.00025025		.00022	mg/L	88	70	130			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02002		.0168	mg/L	84	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.00015	0.00015			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1001		.1023	mg/L	102	90	110			
WG494534CCB1	ССВ	03/31/20 13:57				U	mg/L		-0.00015	0.00015			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L					10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05005	U	.04787	mg/L	96	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05005	U	.04824	mg/L	96	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			U	.000069	mg/L				200	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05005		.04858	mg/L	97	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1001		.1012	mg/L	101	90	110			
WG494534CCB2	ССВ	03/31/20 14:24				U	mg/L		-0.00015	0.00015			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.052658	mg/L	105	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.00015	0.00015			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.00025025		.000267	mg/L	107	70	130			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02002		.019664	mg/L	98	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.00015	0.00015			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05005		.050756	mg/L	101	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05005	.00005	.04871	mg/L	97	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05005	.00005	.050377	mg/L	101	75	125	3	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1001		.100015	mg/L	100	90	110			
WG494824CCB1	CCB	04/02/20 17:59				U	mg/L		-0.00015	0.00015			
L57217-02SDL	SDL	04/02/20 18:04			.00008	U	mg/L					10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1001		.098083	mg/L	98	90	110			
WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.00015	0.00015			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.00015	0.00015			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05005		.049334	mg/L	99	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1001		.098356	mg/L	98	90	110			
WG494824CCB3	ССВ	04/02/20 18:22				U	mg/L		-0.00015	0.00015			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper (MWMT)

M6020B ICP-MS

Copper (MWWIII)			WOOZOD										
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.04876	mg/L	98	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0024	0.0024			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.002004		.00185	mg/L	92	70	130			
WG494662ICSA	ICSA	03/31/20 12:36				U	mg/L		-0.002	0.002			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02004		.01831	mg/L	91	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0024	0.0024			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.0501		.04857	mg/L	97	80	120			
L57215-13SDL	SDL	03/31/20 12:56			.0087	.0103	mg/L				18	10	ZG
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.0501	.0087	.0566	mg/L	96	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.0501	.0087	.05654	mg/L	95	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.2505		.25091	mg/L	100	90	110			
WG494662CCB1	ССВ	03/31/20 13:03				U	mg/L		-0.0024	0.0024			
L57215-13DUP	DUP	03/31/20 13:05			.0087	.01127	mg/L				26	20	RD
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.2505		.24338	mg/L	97	90	110			
WG494662CCB2	ССВ	03/31/20 13:14				U	mg/L		-0.0024	0.0024			
WG494534						-							
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.04589	mg/L	92	90	110			
	ICB		WIO2002 10-2	.05		.04369 U	mg/L	92	-0.0024				
WG494534ICB		03/31/20 13:16	MS200327-4	002004			-	0.4		0.0024			
WG494534PQV	PQV	03/31/20 13:19	W3200327-4	.002004		.00169	mg/L	84	70	130			
WG494534ICSA	ICSA	03/31/20 13:23	M6200202 2	00004		U	mg/L	0.5	-0.002	0.002			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02004		.01707	mg/L	85	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0024	0.0024			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.2505		.252	mg/L	101	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0024	0.0024			
L57215-08SDL	SDL	03/31/20 14:06			.0053	.00595	mg/L				12	10	ZG
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.0501	.0053	.04985	mg/L	89	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.0501	.0053	.04965	mg/L	89	75	125	0	20	
L57215-08DUP	DUP	03/31/20 14:15			.0053	.00673	mg/L				24	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.0501		.04607	mg/L	92	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.2505		.2532	mg/L	101	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0024	0.0024			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05125	mg/L	103	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0024	0.0024			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.002004		.00193	mg/L	96	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.002	0.002			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02004		.01818	mg/L	91	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0024	0.0024			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.0501		.05011	mg/L	100	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.0501	.0037	.05327	mg/L	99	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.0501	.0037	.0543	mg/L	101	75	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.2505		.25217	mg/L	101	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.0024	0.0024			
L57217-02SDL	SDL	04/02/20 18:04			.0068	.0067	mg/L				1	10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.2505		.25848	mg/L	103	90	110	•	•	
WG494824CCB2	CCB	04/02/20 18:13		000		U	mg/L		-0.0024	0.0024			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0024	0.0024			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.0501		.05165	mg/L	103	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.2505		.25292	mg/L	101	90	110			
1 F704F 00070				.2000		.20202		.01	55	110			7 of 051

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2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

#### Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0024 0.0024

Cyanide, WAD (	MWMT)		SM4500-C	N I,E-Co	lorimetric v	w/ distilla	ation						
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qua
WG494511													
WG494511ICV	ICV	03/27/20 15:58	WI200325-11	.3		.2884	mg/L	96	90	110			
WG494511ICB	ICB	03/27/20 15:58				U	mg/L		-0.003	0.003			
WG494483LRB	LRB	03/27/20 15:59				U	mg/L		-0.003	0.003			
WG494483LFB	LFB	03/27/20 16:00	WI200325-9	.2		.183	mg/L	92	90	110			
WG493948PBS	PBS	03/27/20 16:01				U	mg/L		-0.003	0.003			
_57215-01DUP	DUP	03/27/20 16:03			U	U	mg/L				0	20	RA
L57215-02LFM	LFM	03/27/20 16:04	WI200325-9	.2	U	.1872	mg/L	94	90	110			
WG494511CCV1	CCV	03/27/20 16:08	WI200325-10	.25		.2567	mg/L	103	90	110			
WG494511CCB1	CCB	03/27/20 16:09				U	mg/L		-0.003	0.003			
_57215-08DUP	DUP	03/27/20 16:12			U	U	mg/L				0	20	RA
WG494511CCV2	CCV	03/27/20 16:14	WI200325-10	.25		.26	mg/L	104	90	110			
WG494511CCB2	CCB	03/27/20 16:15				U	mg/L		-0.003	0.003			
WG494943													
WG494943ICV	ICV	04/03/20 23:31	WI200325-11	.3		.2898	mg/L	97	90	110			
WG494943ICB	ICB	04/03/20 23:32				U	mg/L		-0.003	0.003			
WG494945													
WG494945CCV1	CCV	04/04/20 0:15	WI200403-7	.25		.2511	mg/L	100	90	110			
WG494945CCB1	ССВ	04/04/20 0:16				U	mg/L		-0.003	0.003			
WG493997PBS	PBS	04/04/20 0:17				U	mg/L		-0.003	0.003			
WG494001PBS	PBS	04/04/20 0:18				U	mg/L		-0.003	0.003			
WG494835LFB	LFB	04/04/20 0:19	WI200325-9	.2		.201	mg/L	101	90	110			
NG494835LRB	LRB	04/04/20 0:19				U	mg/L		-0.003	0.003			
_57215-17LFM	LFM	04/04/20 0:21	WI200325-9	.2	U	.1899	mg/L	95	90	110			
WG494945CCV2	CCV	04/04/20 0:26	WI200403-7	.25		.2529	mg/L	101	90	110			
NG494945CCB2	ССВ	04/04/20 0:26				U	mg/L		-0.003	0.003			
.57215-13DUP2	DUP	04/04/20 0:35			U	U	mg/L				0	20	RA
WG494945CCV3	CCV	04/04/20 0:36	WI200403-7	.25		.2543	mg/L	102	90	110			
VG494945CCB3	ССВ	04/04/20 0:37				U	mg/L		-0.003	0.003			
NG494945CCV4	CCV	04/04/20 0:42	WI200403-7	.25		.249	mg/L	100	90	110			
WG494945CCB4	ССВ	04/04/20 0:43				U	mg/L		-0.003	0.003			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride (MWMT) SM4500F-C

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ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494895													
WG494895ICV	ICV	04/03/20 9:48	WC200331-7	2.004		1.93	mg/L	96	90	110			
WG494895ICB	ICB	04/03/20 9:55				U	mg/L		-0.3	0.3			
WG494895PQV	PQV	04/03/20 9:59	WC200319-3	.3507		.34	mg/L	97	70	130			
WG494895LFB	LFB	04/03/20 10:03	WC191014-1	5.01		4.7	mg/L	94	90	110			
WG493354PBS	PBS	04/03/20 10:07				U	mg/L		-0.3	0.3			
L57101-02AS	AS	04/03/20 10:15	WC191014-1	5.01	2.6	7.65	mg/L	101	90	110			
L57101-02ASD	ASD	04/03/20 10:18	WC191014-1	5.01	2.6	7.61	mg/L	100	90	110	1	20	
WG494895CCV1	CCV	04/03/20 10:48	WC200331-7	2.004		1.91	mg/L	95	90	110			
WG494895CCB1	CCB	04/03/20 10:55				U	mg/L		-0.3	0.3			
WG493948PBS	PBS	04/03/20 11:02				U	mg/L		-0.3	0.3			
L57215-08AS	AS	04/03/20 11:31	WC191014-1	5.01	3.4	8.16	mg/L	95	90	110			
L57215-08DUP	DUP	04/03/20 11:35			3.4	3.68	mg/L				8	20	
WG494895CCV2	CCV	04/03/20 11:39	WC200331-7	2.004		1.94	mg/L	97	90	110			
WG494895CCB2	CCB	04/03/20 11:46				U	mg/L		-0.3	0.3			
WG495130													
WG495130ICV	ICV	04/08/20 11:05	WC200406-1	2.004		2.04	mg/L	102	90	110			
WG495130ICB	ICB	04/08/20 11:09				U	mg/L		-0.3	0.3			
WG495130PQV	PQV	04/08/20 11:12	WC200319-3	.3507		.37	mg/L	106	70	130			
WG495130LFB1	LFB	04/08/20 11:15	WC191014-1	5.01		4.96	mg/L	99	90	110			
WG493997PBS	PBS	04/08/20 11:19				.12	mg/L		-0.3	0.3			
L57215-13AS	AS	04/08/20 11:43	WC191014-1	5.01	2.8	7.51	mg/L	94	90	110			
L57215-13DUP	DUP	04/08/20 11:46			2.8	3.28	mg/L				16	20	
WG495130CCV1	CCV	04/08/20 11:59	WC200406-1	2.004		2.09	mg/L	104	90	110			
WG495130CCB1	CCB	04/08/20 12:06				U	mg/L		-0.3	0.3			
WG494001PBS	PBS	04/08/20 12:12				U	mg/L		-0.3	0.3			
L57215-17AS	AS	04/08/20 12:18	WC191014-1	5.01	1.3	6.32	mg/L	100	90	110			
L57215-17ASD	ASD	04/08/20 12:22	WC191014-1	5.01	1.3	6.26	mg/L	99	90	110	1	20	
WG495130CCV2	CCV	04/08/20 12:51	WC200406-1	2.004		2.13	mg/L	106	90	110			
WG495130CCB2	CCB	04/08/20 12:58				U	mg/L		-0.3	0.3			
WG494003PBS	PBS	04/08/20 13:02				U	mg/L		-0.3	0.3			
WG495130LFB2	LFB	04/08/20 13:16	WC191014-1	5.01		5.07	mg/L	101	90	110			
WG494754PBS	PBS	04/08/20 13:38				U	mg/L		-0.3	0.3			
L58048-04DUP	DUP	04/08/20 13:52			2	2.08	mg/L				4	20	
WG495130CCV3	CCV	04/08/20 13:55	WC200406-1	2.004		2.14	mg/L	107	90	110			
WG495130CCB3	CCB	04/08/20 14:03				U	mg/L		-0.3	0.3			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron (MWMT) M6010D ICP

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.925	mg/L	96	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.18	0.18			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.15027		.154	mg/L	102	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	100.18		94.22	mg/L	94	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.18	0.18			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	1.0018		.988	mg/L	99	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		.966	mg/L	97	90	110			
WG494597CCB1	ССВ	03/30/20 23:31				U	mg/L		-0.18	0.18			
L57215-08SDL	SDL	03/30/20 23:35			U	U	mg/L				0	10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	1.0018	U	1.044	mg/L	104	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	1.0018	U	1.029	mg/L	103	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			U	.093	mg/L				200	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		.972	mg/L	97	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.18	0.18			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		1.947	mg/L	97	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.18	0.18			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.15027		.135	mg/L	90	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	100.18		95.95	mg/L	96	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.18	0.18			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	1.0018		.955	mg/L	95	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	1.0018	U	.97	mg/L	97	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	1.0018	U	.97	mg/L	97	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			U	.289	mg/L				200	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		1.003	mg/L	100	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.18	0.18			
L57215-14SDL	SDL	04/01/20 15:31			U	U	mg/L				0	10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.947	mg/L	95	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.18	0.18			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.903	mg/L	95	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.18	0.18			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.15027		.152	mg/L	101	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	II200302-6	100.18		94	mg/L	94	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.18	0.18			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	1.0018		1.029	mg/L	103	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	1.0018	U	.991	mg/L	99	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	1.0018	U	1.033	mg/L	103	75	125	4	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1		.975	mg/L	98	90	110			
WG494800CCB1	ССВ	04/02/20 10:03				U	mg/L		-0.18	0.18			
L57217-02SDL	SDL	04/02/20 10:07			U	U	mg/L				0	10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	1	-	.972	mg/L	97	90	110	-	•	
				-			-						

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead (MWMT) M6020B ICP-MS

Lead (MVVIIII)			WIOOZOB										
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.05097	mg/L	102	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0003	0.0003			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.0005005		.00049	mg/L	98	70	130			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02002		.02046	mg/L	102	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0003	0.0003			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05005		.04939	mg/L	99	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05005	U	.05004	mg/L	100	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05005	U	.04989	mg/L	100	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.25025		.25284	mg/L	101	90	110	-		
WG494662CCB1	CCB	03/31/20 13:03		.20020		U	mg/L	101	-0.0003	0.0003			
L57215-13DUP	DUP	03/31/20 13:05			U	.00012	mg/L		-0.0000	0.0000	200	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.25025	O	.25118	mg/L	100	90	110	200	20	101
WG494662CCB2	CCB	03/31/20 13:14	0200220 0	.23023		.23110 U	mg/L	100	-0.0003	0.0003			
WG494002CCB2	ССВ	03/31/20 13.14				U	mg/L		-0.0003	0.0003			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.048	mg/L	96	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.0003	0.0003			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.0005005		.00041	mg/L	82	70	130			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02002		.01813	mg/L	91	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0003	0.0003			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.25025		.2525	mg/L	101	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0003	0.0003			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L					10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05005	U	.04741	mg/L	95	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05005	U	.04774	mg/L	95	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			U	U	mg/L				0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05005		.04661	mg/L	93	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.25025		.2536	mg/L	101	90	110			
WG494534CCB2	ССВ	03/31/20 14:24				U	mg/L		-0.0003	0.0003			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05187	mg/L	104	90	110			
WG494824ICB	ICB	04/02/20 17:35		.00		.03107 U	mg/L	104	-0.0003	0.0003			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.0005005		.00051	mg/L	102	70	130			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200207-7	.02002		.01994	mg/L	100	80	120			
	PBS		WO200200 E	.02002		.01994 U	mg/L	100	-0.0003				
WG494001PBS		04/02/20 17:44	MS200120-3	05005				00		0.0003			
WG494001LFB2	LFB	04/02/20 17:46		.05005		.04908	mg/L	98	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05005	U	.04805	mg/L	96	75 75	125	2	00	
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05005	U	.04935	mg/L	99	75	125	3	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.25025		.24977	mg/L	100	90	110			
WG494824CCB1	CCB	04/02/20 17:59				U	mg/L		-0.0003	0.0003		4.5	
L57217-02SDL	SDL	04/02/20 18:04	1100000000	05	U	U	mg/L	4	0.5			10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.25025		.25146	mg/L	100	90	110			
WG494824CCB2	ССВ	04/02/20 18:13				U	mg/L		-0.0003	0.0003			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05005		.04968	mg/L	99	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.25025		.25167	mg/L	101	90	110			
WG494824CCB3	CCB	04/02/20 18:22				U	mg/L		-0.0003	0.0003			
-													

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium (MWMT) M6010D ICP

WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.918	mg/L	96	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.024	0.024			
WG494597PQV	PQV	03/30/20 22:28	II200327-2	.04008		.0429	mg/L	107	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	II200302-6	.501		.4954	mg/L	99	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.024	0.024			
WG493948LFB1	LFB	03/30/20 22:52	II200302-4	1.002		.9688	mg/L	97	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		.9701	mg/L	97	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.024	0.024			
L57215-08SDL	SDL	03/30/20 23:35			.009	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	II200302-4	1.002	.009	.9799	mg/L	97	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	1.002	.009	.9709	mg/L	96	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			.009	.0092	mg/L				2	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		.9655	mg/L	97	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.024	0.024			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		1.977	mg/L	99	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.024	0.024			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.04008		.0333	mg/L	83	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	.501		.4958	mg/L	99	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.024	0.024			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	1.002		.9582	mg/L	96	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	1.002	U	.9751	mg/L	97	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	1.002	U	.9797	mg/L	98	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			U	U	mg/L				0	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		1.005	mg/L	101	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.024	0.024			
L57215-14SDL	SDL	04/01/20 15:31			U	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.9451	mg/L	95	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.024	0.024			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.952	mg/L	98	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.024	0.024			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.04008		.0413	mg/L	103	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	.501		.5031	mg/L	100	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.024	0.024			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	1.002		.9652	mg/L	96	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	1.002	U	.9698	mg/L	97	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	1.002	U	.9773	mg/L	98	75	125	1	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1	-	.9581	mg/L	96	90	110	•	*	
WG494800CCB1	CCB	04/02/20 10:03		•		U	mg/L	- •	-0.024	0.024			
L57217-02SDL	SDL	04/02/20 10:07			.008	U	mg/L		0.021	J.JE 1		10	
WG494800CCV2	CCV	04/02/20 10:07	II200318-5	1	.500	.947	mg/L	95	90	110			
WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.024	0.024			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium (MWMT)

M6010D ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	100		96.47	mg/L	96	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.6	0.6			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	1		1.02	mg/L	102	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	II200302-6	250		250.6	mg/L	100	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.6	0.6			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	49.99771		48.48	mg/L	97	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	50		47.79	mg/L	96	90	110			
WG494597CCB1	ССВ	03/30/20 23:31				U	mg/L		-0.6	0.6			
L57215-08SDL	SDL	03/30/20 23:35			.6	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	49.99771	.6	50.18	mg/L	99	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	49.99771	.6	49.58	mg/L	98	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46		10.00111	.6	.74	mg/L		. 0	0	21	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	50		48.3	mg/L	97	90	110			
WG494597CCB2	CCB	03/30/20 23:54				U	mg/L		-0.6	0.6			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	100		97.38	mg/L	97	90	110			
WG494738ICB	ICB	04/01/20 14:12	2000.00	100		J7.50	mg/L	31	-0.6	0.6			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	1		1.02	mg/L	102	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:19	II200302-6	250		247.2	mg/L	99	80	120			
WG493997PBS	PBS	04/01/20 14:20	200002 0	250		U U	mg/L	33	-0.6	0.6			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	49.99771		46.39	mg/L	93	80	120			
L57215-13MS2	MS	04/01/20 14:44	11200302-4	49.99771	.9	49.11	mg/L	96	75	125			
L57215-13MSD2	MSD	04/01/20 15:07	11200302-4	49.99771	.9	49.4	mg/L	97	75 75	125	1	20	
L57215-13DUP	DUP	04/01/20 15:11	11200002 4	49.33771	.9	1.08	mg/L	31	73	123	18	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	50	.5	49.59	mg/L	99	90	110	10	20	IVA
WG494738CCB1	CCB	04/01/20 15:19	112000100	30		49.59 U	mg/L	99	-0.6	0.6			
L57215-14SDL	SDL	04/01/20 15:23			1.4	1.45	mg/L		-0.0	0.0	4	10	
WG494738CCV2	CCV	04/01/20 15:31	II200318-5	50	1.4	47.07	mg/L	94	90	110	4	10	
WG494738CCB2	CCB	04/01/20 15:47	112000100	30		47.07 U	mg/L	34	-0.6	0.6			
	ССВ	04/01/20 13.47				U	mg/L		-0.0	0.0			
WG494800	101/	04/00/00 0.50	II200318-6	100		07.50	ma/l	00	00	440			
WG494800ICV	ICV	04/02/20 8:52	11200310-0	100		97.58	mg/L	98	90	110			
WG494800ICB	ICB	04/02/20 8:56	U200404 F	4		U	mg/L	07	-0.6	0.6			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	1		.87	mg/L	87	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	250		254.5	mg/L	102	80	120			
WG494001PBS	PBS	04/02/20 9:20	11200202 4	40.0077.		U 40.70	mg/L	400	-0.6	0.6			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	49.99771		49.78	mg/L	100	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	49.99771	.2	49.15	mg/L	98	75 75	125		00	
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	49.99771	.2	49.43	mg/L	98	75	125	1	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	50		49.31	mg/L	99	90	110			
WG494800CCB1	CCB	04/02/20 10:03				U	mg/L		-0.6	0.6			
L57217-02SDL	SDL	04/02/20 10:07			3.8	3.05	mg/L				20	10	ZG
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	50		49.15	mg/L	98	90	110			
WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.6	0.6			

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese (MWMT)

M6020B ICP-MS

WG494662CV         ICV         03/31/20 12:31         MS200331-1         .05         .04888         mg/L         98         90         110         V         V         VG494662ICB         ICB         03/31/20 12:33         MS200327-4         .002004         .00193         mg/L         96         70         130         V         V         VG494662ICSA         ICSA         03/31/20 12:36         MS200327-4         .002004         .00193         mg/L         96         70         130         V         V         V         VG494662ICSA         ICSA         03/31/20 12:38         MS200203-2         .002004         .00162         mg/L         107         80         120         .0012         V         V         VG494662ICSA         ICSAB         03/31/20 12:44         MS200120-3         .0501         .004861         mg/L         107         80         120         .0012         V         V         80         120         .0012         .0014         .00461         mg/L         97         80         120         .0012         .0014         .00461         mg/L         97         75         125         .0012         .0014         .00461         mg/L         97         75         125         .0014         .00461         .00461 </th <th></th> <th></th> <th></th> <th>PCN/SCN</th> <th>QC</th> <th>Sample</th> <th></th> <th>Units</th> <th>Rec%</th> <th>Lower</th> <th>Upper</th> <th>RPD</th> <th></th> <th>Qual</th>				PCN/SCN	QC	Sample		Units	Rec%	Lower	Upper	RPD		Qual
WG494662ICV	WG494662													
WG494662ICB		ICV	03/31/20 12:31	MS200331-1	05		04888	ma/l	08	90	110			
WG494662CQSA   CSA   03/31/20 12:35   MS200327-4   .002004   .00193   mg/L   96   70   130   .				W6200001 1	.00				90					
WG494662ICSAB   ICSAB   03/31/20 12:38   MS200203-2   0.2004   0.2144   mg/L   107   80   120				MS200327-4	002004				96					
WG494662ICSAB				WOZOOZI 4					30					
WG493997PBS         PBS         03/31/20 12:44         Section 1         Use of MS20120-3         Use of MS2				MS200203-2					107					
MG493997LFB2				W0200200 2	.02004				107					
L57215-13SDL   SDL   03/31/20 12:56   SDL   03/31/20 12:58   MS200120-3   .0501   .0011   .04987   mg/L   97   75   12				MS200120-3	0501			_	97					
L57215-13MS1   MS				W0200120 0	.0001	0011			31	00	120		10	
L57215-13MSD1				MS200120-3	0501			_	97	75	125		10	
WG494662CCV1         CCV         03/31/20 13:01         MS200228-5         .1002         .10332         mg/L         103         90         110         .110 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>20</td><td></td></th<>												1	20	
WG494662CCB1   CCB   03/31/20 13:03     WS200228-5   .1002   .0011   .00069   mg/L     -0.0012   0.0012     46   20   E   WG494662CCV2   CCV   03/31/20 13:12   MS200228-5   .1002   .1014   mg/L   101   90   110     WG494662CCB2   CCB   03/31/20 13:14   WS200228-5   .1002   .005   WG494662CCB2   CCB   03/31/20 13:14   WS200210-2   .05   .04983   mg/L   100   90   .110   WG494534CCB   ICB   03/31/20 13:15   WS200227-4   .002004   .00175   mg/L   87   70   .130   .0002   WG494534CSA   ICSA   03/31/20 13:23   .00059   .00059   mg/L   .00012   .0001						.0011						'	20	
L57215-13DUP   DUP   03/31/20 13:05   MS200228-5   1.1002   1.1014   mg/L   101   90   110   110   WG494662CCV2   CCV   03/31/20 13:14   WS200228-5   1.1002   U mg/L   -0.0012   0.0012   U mg/L   U mg/L   0.0012   U mg/L   U m				W0200220 0	.1002				103					
WG494662CCV2						0011				-0.0012	0.0012	46	20	RA
WG494662CCB2         CCB         03/31/20 13:14         U         mg/L         -0.0012         0.0012           WG494534         WG494534ICV         ICV         03/31/20 13:13         MS200210-2         .05         .04983         mg/L         100         90         110           WG494534ICB         ICB         03/31/20 13:16         -00012         .002004         .00175         mg/L         87         70         130           WG494534ICSA         ICSA         03/31/20 13:23         .00059         .00059         mg/L         87         70         130           WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG494534CCAB         PBS         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCV         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08MSD1         MS         03/31/				MS200228-5	1002	.0011			101	00	110	40	20	IVA
WG494534ICV         ICV         03/31/20 13:13         MS200210-2         .05         .04983         mg/L         100         90         110           WG494534ICB         ICB         03/31/20 13:16         -0.0010         -0.0012         0.0012         0.0012           WG494534ICBA         ICBA         03/31/20 13:19         MS200327-4         .002004         0.00175         mg/L         87         70         130           WG494534ICSA         ICSA         03/31/20 13:23         0.00059         0.00059         mg/L         85         80         120           WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         0.02004         0.1705         mg/L         85         80         120           WG49494534ICSAB         PBS         03/31/20 13:32         U         0.02004         0.01705         mg/L         85         80         120           WG494534ICSAB         PBS         03/31/20 13:32         U         U         mg/L         90         110           WG494534ICCSH         CCV         03/31/20 13:54         MS200228-5         1.002         1.018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 14:06				WO200220 0	.1002				101					
WG494534ICV         ICV         03/31/20 13:13         MS200210-2         .05         .04983         mg/L         100         90         110           WG494534ICB         ICB         03/31/20 13:16         U         mg/L         -0.0012         0.0012           WG494534PQV         PQV         03/31/20 13:19         MS200327-4         .002004         .00175         mg/L         87         70         130           WG494534ICSA         ICSA         03/31/20 13:23         .00059         .00059         mg/L         85         80         120           WG4934534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG494534ICSAB         PBS         03/31/20 13:32         U         mg/L         101         mg/L         -0.0012         0.0012           WG494534ICSAB         PBS         03/31/20 13:57         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534ICSAB         CCI         03/31/20 13:57         U         U         mg/L         102         90         110           WG494534ICSAB         SDL         03/31/20 14:06         U		ССВ	03/31/20 13.14				U	mg/L		-0.0012	0.0012			
WG494534ICB         ICB         03/31/20 13:16         U         mg/L         -0.0012         0.0012           WG494534PQV         PQV         03/31/20 13:19         MS200327-4         .002004         .00175         mg/L         87         70         130           WG494534ICSA         ICSA         03/31/20 13:23         .00059         .00059         mg/L         -0.002         0.002           WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG493948PBS         PBS         03/31/20 13:32         U         mg/L         -0.0012         0.0012           WG494534CCV1         CCV         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125         0         20           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U				110000010										
WG494534PQV         PQV         03/31/20 13:19         MS200327-4         .002004         .00175         mg/L         87         70         130           WG494534ICSA         ICSA         03/31/20 13:23         .00059         .00059         mg/L         -0.002         0.002           WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG493948PBS         PBS         03/31/20 13:32         L         U         mg/L         -0.0012         0.0012           WG494534CCV1         CCV         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U         .04861         mg/L         97         75         125         0         20				MS200210-2	.05				100					
WG494534ICSA         ICSA         03/31/20 13:23         .00059         .00059         mg/L         -0.002         0.002           WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG493948PBS         PBS         03/31/20 13:32         U         mg/L         -0.0012         0.0012           WG494534CCV1         CCV         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U         .04861         mg/L         97         75         125         0         20				M0000007 4	000004									
WG494534ICSAB         ICSAB         03/31/20 13:26         MS200203-2         .02004         .01705         mg/L         85         80         120           WG493948PBS         PBS         03/31/20 13:32         U         U         mg/L         -0.0012         0.0012           WG494534CCV1         CCV         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U         .04861         mg/L         97         75         125         0         20				MS200327-4					87					
WG493948PBS         PBS         03/31/20 13:32         U         mg/L         -0.0012         0.0012           WG494534CCV1         CCV         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U         .04861         mg/L         97         75         125         0         20														
WG494534CCV1         CCV         03/31/20 13:54         MS200228-5         .1002         .1018         mg/L         102         90         110           WG494534CCB1         CCB         03/31/20 13:57         U         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U         .04861         mg/L         97         75         125         0         20				MS200203-2	.02004				85					
WG494534CCB1         CCB         03/31/20 13:57         U         mg/L         -0.0012         0.0012           L57215-08SDL         SDL         03/31/20 14:06         U         U         U         mg/L         97         75         125           L57215-08MSD1         MSD         03/31/20 14:12         MS200120-3         .0501         U         .04861         mg/L         97         75         125         0         20														
L57215-08SDL SDL 03/31/20 14:06 U U mg/L 10 L57215-08MS1 MS 03/31/20 14:09 MS200120-3 .0501 U .04856 mg/L 97 75 125 L57215-08MSD1 MSD 03/31/20 14:12 MS200120-3 .0501 U .04861 mg/L 97 75 125 0 20				MS200228-5	.1002				102					
L57215-08MS1 MS 03/31/20 14:09 MS200120-3 .0501 U .04856 mg/L 97 75 125 L57215-08MSD1 MSD 03/31/20 14:12 MS200120-3 .0501 U .04861 mg/L 97 75 125 0 20								_		-0.0012	0.0012			
L57215-08MSD1 MSD 03/31/2014:12 MS200120-3 .0501 U .04861 mg/L 97 75 125 0 20													10	
1.57215.08DLID DLID 02/21/20.14/-15 II 00440 ma/l 200 200 F				MS200120-3	.0501			_	97	75	125			
	L57215-08DUP	DUP	03/31/20 14:15			U	.00119	mg/L				200	20	RA
WG493948LFB2 LFB 03/31/20 14:19 MS200120-3 .0501 .04934 mg/L 98 80 120														
WG494534CCV2 CCV 03/31/20 14:22 MS200228-5 .1002 .1016 mg/L 101 90 110				MS200228-5	.1002				101					
WG494534CCB2 CCB 03/31/20 14:24 U mg/L -0.0012 0.0012	WG494534CCB2	ССВ	03/31/20 14:24				U	mg/L		-0.0012	0.0012			
WG494824	WG494824													
WG494824ICV ICV 04/02/20 17:33 MS200331-1 .05 .05014 mg/L 100 90 110	WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05014	mg/L	100	90	110			
WG494824ICB ICB 04/02/20 17:35 U mg/L -0.0012 0.0012	WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0012	0.0012			
WG494824PQV PQV 04/02/20 17:37 MS200327-4 .002004 .00201 mg/L 100 70 130	WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.002004		.00201	mg/L	100	70	130			
WG494824ICSA ICSA 04/02/20 17:39 .00063 .00063 mg/L -0.002 0.002	WG494824ICSA	ICSA	04/02/20 17:39		.00063		.00063	mg/L		-0.002	0.002			
WG494824ICSAB ICSAB 04/02/20 17:40 MS200203-2 .02004 .01997 mg/L 100 80 120	WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02004		.01997	mg/L	100	80	120			
WG494001PBS PBS 04/02/20 17:44 U mg/L -0.0012 0.0012	WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0012	0.0012			
WG494001LFB2 LFB 04/02/20 17:46 MS200120-3 .0501 .05013 mg/L 100 80 120	WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.0501		.05013	mg/L	100	80	120			
L57215-17MS1 MS 04/02/20 17:50 MS200120-3 .0501 U .04904 mg/L 98 75 125	L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.0501	U	.04904	mg/L	98	75	125			
L57215-17MSD1 MSD 04/02/20 17:52 MS200120-3 .0501 U .04947 mg/L 99 75 125 1 20	L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.0501	U	.04947	mg/L	99	75	125	1	20	
WG494824CCV1 CCV 04/02/20 17:57 MS200228-5 .1002 .09785 mg/L 98 90 110	WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1002		.09785	mg/L	98	90	110			
WG494824CCB1 CCB 04/02/20 17:59 U mg/L -0.0012 0.0012	WG494824CCB1	CCB	04/02/20 17:59				U	mg/L		-0.0012	0.0012			
L57217-02SDL SDL 04/02/20 18:04 U U mg/L 10	L57217-02SDL	SDL	04/02/20 18:04			U	U	mg/L					10	
WG494824CCV2 CCV 04/02/20 18:12 MS200228-5 .1002 .09712 mg/L 97 90 110	WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1002		.09712	mg/L	97	90	110			
WG494824CCB2 CCB 04/02/20 18:13 U mg/L -0.0012 0.0012	WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.0012	0.0012			
WG494001PBS PBS 04/02/20 18:15 U mg/L -0.0012 0.0012	WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0012	0.0012			
WG494001LFB2 LFB 04/02/20 18:17 MS200120-3 .0501 .04836 mg/L 97 80 120	WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.0501		.04836	mg/L	97	80	120			
WG494824CCV3 CCV 04/02/20 18:21 MS200228-5 .1002 .09844 mg/L 98 90 110	WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1002		.09844	mg/L	98	90	110			

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Inorganic QC Summary

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0012 0.0012

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury (MWMT)

M7470A CVAA

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494438													
WG494438ICV	ICV	03/27/20 12:51	HG200224-3	.004995		.00474	mg/L	95	95	105			
WG494438ICB	ICB	03/27/20 12:52				U	mg/L		-0.0002	0.0002			
WG494439													
WG494439CCV1	CCV	03/27/20 13:25	HG200224-3	.004995		.00496	mg/L	99	90	110			
WG494439CCB1	ССВ	03/27/20 13:26				U	mg/L		-0.0006	0.0006			
WG494439PQV	PQV	03/27/20 13:27	HG200323-3	.001001		.00107	mg/L	107	70	130			
WG493948PBS	PBS	03/27/20 13:28				U	mg/L		-0.0006	0.0006			
WG493948LFB1	LFB	03/27/20 13:29	HG200323-4	.002002		.00204	mg/L	102	85	115			
WG494439CCV2	CCV	03/27/20 13:37	HG200224-3	.004995		.0049	mg/L	98	90	110			
WG494439CCB2	ССВ	03/27/20 13:37				U	mg/L		-0.0006	0.0006			
L57215-08MS2	MS	03/27/20 13:39	HG200323-4	.002002	U	.00201	mg/L	100	85	115			
L57215-08MSD2	MSD	03/27/20 13:40	HG200323-4	.002002	U	.00207	mg/L	103	85	115	3	20	
L57215-08DUP	DUP	03/27/20 13:41			U	U	mg/L				0	20	RA
WG494439CCV3	CCV	03/27/20 13:42	HG200224-3	.004995		.0049	mg/L	98	90	110			
WG494439CCB3	ССВ	03/27/20 13:43				U	mg/L		-0.0006	0.0006			
WG494610													
WG494610ICV	ICV	03/31/20 15:30	HG200224-3	.004995		.00484	mg/L	97	95	105			
WG494610ICB	ICB	03/31/20 15:31				U	mg/L		-0.0002	0.0002			
WG494613													
WG494613CCV1	CCV	03/31/20 16:53	HG200224-3	.004995		.00484	mg/L	97	90	110			
WG494613CCB1	CCB	03/31/20 16:54		.001000		U	mg/L	0.	-0.0006	0.0006			
WG494613PQV	PQV	03/31/20 16:55	HG200330-2	.001001		.00089	mg/L	89	70	130			
WG493997PBS	PBS	03/31/20 16:56		.00.00.		U	mg/L		-0.0006	0.0006			
WG493997LFB1	LFB	03/31/20 16:57	HG200330-3	.002002		.00183	mg/L	91	85	115			
L57215-13MS2	MS	03/31/20 17:03	HG200330-3	.002002	U	.00195	mg/L	97	85	115			
L57215-13MSD2	MSD	03/31/20 17:04	HG200330-3	.002002	U	.00183	mg/L	91	85	115	6	20	
WG494613CCV2	CCV	03/31/20 17:05	HG200224-3	.004995		.00475	mg/L	95	90	110			
WG494613CCB2	ССВ	03/31/20 17:05				U	mg/L		-0.0006	0.0006			
L57215-13DUP	DUP	03/31/20 17:06			U	U	mg/L				0	20	RA
WG494613CCV3	CCV	03/31/20 17:10	HG200224-3	.004995		.00472	mg/L	94	90	110			
WG494613CCB3	ССВ	03/31/20 17:11				U	mg/L		-0.0006	0.0006			
WG494698													
WG494698ICV	ICV	04/01/20 14:09	HG200224-3	.004995		.00512	mg/L	103	95	105			
WG494698ICB	ICB	04/01/20 14:10				U	mg/L		-0.0002	0.0002			
WG494701													
WG494701CCV1	CCV	04/01/20 15:14	HG200224-3	.004995		.00488	mg/L	98	90	110			
WG494701CCB1	ССВ	04/01/20 15:15				U	mg/L		-0.0006	0.0006			
WG494701PQV	PQV	04/01/20 15:16	HG200330-2	.001001		.00098	mg/L	98	70	130			
WG494001PBS	PBS	04/01/20 15:17				U	mg/L		-0.0006	0.0006			
WG494001LFB1	LFB	04/01/20 15:18	HG200330-3	.002002		.0019	mg/L	95	85	115			
L57215-17MS2	MS	04/01/20 15:20	HG200330-3	.002002	U	.00203	mg/L	101	85	115			
L57215-17MSD2	MSD	04/01/20 15:21	HG200330-3	.002002	U	.00208	mg/L	104	85	115	2	20	
WG494701CCV2	CCV	04/01/20 15:26	HG200224-3	.004995		.00485	mg/L	97	90	110			
WG494701CCB2	ССВ	04/01/20 15:27				U	mg/L		-0.0006	0.0006			
WG494701CCV3	CCV	04/01/20 15:31	HG200224-3	.004995		.00477	mg/L	95	90	110			
WG494701CCB3	ССВ	04/01/20 15:32				U	mg/L		-0.0006	0.0006			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum (MWMT)

M6020B ICP-MS

worybaenum (w	vvivi I )		IVIOUZUB	ICF-IVIS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.0199		.01968	mg/L	99	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0006	0.0006			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.000501		.00048	mg/L	96	70	130			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	1.02004		1.0648	mg/L	104	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0006	0.0006			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.0501		.05005	mg/L	100	80	120			
L57215-13SDL	SDL	03/31/20 12:56			.1193	.12955	mg/L				9	10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.0501	.1193	.16958	mg/L	100	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.0501	.1193	.17129	mg/L	104	75	125	1	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1002		.10443	mg/L	104	90	110			
WG494662CCB1	ССВ	03/31/20 13:03				U	mg/L		-0.0006	0.0006			
L57215-13DUP	DUP	03/31/20 13:05			.1193	.10997	mg/L				8	20	
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.1002		.10222	mg/L	102	90	110			
WG494662CCB2	ССВ	03/31/20 13:14				U	mg/L		-0.0006	0.0006			
	002	00,01,2010111				· ·	Ŭ		0.0000	0.000			
WG494534	10) /	00/04/00 40 40	M0000040 0	0.400		0.400=				440			
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.0199		.01867	mg/L	94	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.0006	0.0006			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.000501		.00044	mg/L	88	70	130			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	1.02004		.9922	mg/L	97	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0006	0.0006			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1002		.1025	mg/L	102	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0006	0.0006			
L57215-08SDL	SDL	03/31/20 14:06			.0348	.03395	mg/L				2	10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.0501	.0348	.08693	mg/L	104	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.0501	.0348	.08666	mg/L	104	75	125	0	20	
L57215-08DUP	DUP	03/31/20 14:15			.0348	.04388	mg/L				23	20	RD
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.0501		.04543	mg/L	91	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1002		.1019	mg/L	102	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0006	0.0006			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.0199		.02021	mg/L	102	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0006	0.0006			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.000501		.00047	mg/L	94	70	130			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	1.02004		1.06694	mg/L	105	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0006	0.0006			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.0501		.04945	mg/L	99	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.0501	.0303	.07805	mg/L	95	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.0501	.0303	.07963	mg/L	98	75	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1002		.09997	mg/L	100	90	110			
WG494824CCB1	CCB	04/02/20 17:59				U	mg/L		-0.0006	0.0006			
L57217-02SDL	SDL	04/02/20 18:04			.0684	.06735	mg/L				2	10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1002		.0982	mg/L	98	90	110			
WG494824CCB2	ССВ	04/02/20 18:13				U	mg/L		-0.0006	0.0006			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0006	0.0006			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.0501		.04857	mg/L	97	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1002		.09909	mg/L	99	90	110			
WG494824CCB3	ССВ	04/02/20 18:22				U	mg/L		-0.0006	0.0006			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel (MWMT) M6020B ICP-MS

Nickel (MWMT)			M6020B I	CP-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.04924	mg/L	98	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0012	0.0012			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.001		.0009	mg/L	90	70	130			
WG494662ICSA	ICSA	03/31/20 12:36				U	mg/L		-0.001	0.001			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02		.01944	mg/L	97	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0012	0.0012			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05		.04904	mg/L	98	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05	U	.04921	mg/L	98	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05	U	.04935	mg/L	99	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.25		.25094	mg/L	100	90	110			
WG494662CCB1	CCB	03/31/20 13:03				U	mg/L		-0.0012	0.0012			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.25		.24584	mg/L	98	90	110			
WG494662CCB2	CCB	03/31/20 13:14				U	mg/L		-0.0012	0.0012			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.04679	mg/L	94	90	110			
WG494534ICB	ICB	03/31/20 13:16		.00		U	mg/L	0.	-0.0012	0.0012			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.001		.00094	mg/L	94	70	130			
WG494534ICSA	ICSA	03/31/20 13:23		.001		.00034 U	mg/L	54	-0.001	0.001			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02		.0171	mg/L	86	80	120			
WG493948PBS	PBS	03/31/20 13:32		.02		U	mg/L	00	-0.0012	0.0012			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.25		.2374	mg/L	95	90	110			
WG494534CCB1	CCB	03/31/20 13:57	0200220 0	.20		.207 <del>-</del> U	mg/L	30	-0.0012	0.0012			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L		-0.0012	0.0012		10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05	U	.04503	mg/L	90	75	125		10	
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05	U	.0449	mg/L	90	75	125	0	20	
L57215-08DUP	DUP	03/31/20 14:15		.00	U	.00051	mg/L		. •	0	200	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05	· ·	.0458	mg/L	92	80	120		_0	
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.25		.24	mg/L	96	90	110			
WG494534CCB2	CCB	03/31/20 14:24		.20		U	mg/L	00	-0.0012	0.0012			
WG494824							ŭ						
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05138	mg/L	103	90	110			
WG494824ICB	ICB	04/02/20 17:35	WO200331-1	.03		.03130	mg/L	103	-0.0012	0.0012			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.001		.00098	mg/L	98	70	130			
WG494824ICSA	ICSA	04/02/20 17:39	WIG200027 4	.001		.00090	mg/L	90	-0.001	0.001			
WG494824ICSAB	ICSAB	04/02/20 17:39	MS200203-2	.02		.01818	mg/L	91	80	120			
WG494001PBS	PBS	04/02/20 17:40	WIG200200 Z	.02		.01010 U	mg/L	91	-0.0012	0.0012			
WG494001LFB2	LFB	04/02/20 17:44	MS200120-3	.05		.04907	mg/L	98	80	120			
L57215-17MS1	MS	04/02/20 17:40	MS200120-3	.05	U	.04839	mg/L	97	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05	U	.04931	mg/L	99	75 75		2	20	
WG494824CCV1	CCV		MS200228-5	.05	U	.25196	mg/L	101	90	125 110	2	20	
WG494824CCV1	CCB	04/02/20 17:57 04/02/20 17:59		.20		.23190 U	mg/L	101	-0.0012	0.0012			
L57217-02SDL	SDL	04/02/20 17:59			U	U	mg/L		-0.0012	0.0012		10	
WG494824CCV2	CCV	04/02/20 18:04	MS200228-5	.25	U	.25385	mg/L	102	90	110		10	
WG494824CCV2	CCB	04/02/20 18:13		.20		.23363 U	mg/L	102	-0.0012	0.0012			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0012	0.0012			
WG494001FB3 WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05		.0505	mg/L	101	80	120			
WG494001LFB2 WG494824CCV3	CCV	04/02/20 18:17	MS200228-5	.05		.25268	mg/L	101	90	110			
L 57215-20072				.20		.20200		101	50	110			8 of 25

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2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

#### Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0012 0.0012

Nitrate/Nitrite as	s N (MW	MT)	M353.2 -	Automate	d Cadmiur	n Reduc	tion						
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494450													
WG494450ICV	ICV	03/26/20 21:56	WI200213-7	2.416		2.485	mg/L	103	90	110			
WG494450ICB	ICB	03/26/20 21:57				U	mg/L		-0.02	0.02			
WG494452													
WG494452CCV1	CCV	03/26/20 23:28	WI200320-3	2		2.02	mg/L	101	90	110			
WG494452CCB1	ССВ	03/26/20 23:31				U	mg/L		-0.02	0.02			
WG494452LFB	LFB	03/26/20 23:32	WI191004-3	2		2.012	mg/L	101	90	110			
WG493948PBS	PBS	03/26/20 23:34				U	mg/L		-0.02	0.02			
WG494452CCV2	CCV	03/26/20 23:45	WI200320-3	2		2.004	mg/L	100	90	110			
WG494452CCB2	CCB	03/26/20 23:48				U	mg/L		-0.02	0.02			
L57215-08DUP	DUP	03/26/20 23:55			U	U	mg/L				0	20	RA
WG494452CCV3	CCV	03/26/20 23:58	WI200320-3	2		1.966	mg/L	98	90	110			
WG494452CCB3	CCB	03/27/20 0:01				U	mg/L		-0.02	0.02			
WG494705													
WG494705ICV	ICV	04/01/20 0:36	WI200213-7	2.416		2.431	mg/L	101	90	110			
WG494705ICB	ICB	04/01/20 0:37				U	mg/L		-0.02	0.02			
WG494707													
WG494707CCV1	CCV	04/01/20 1:18	WI200331-17	2		2.012	mg/L	101	90	110			
WG494707CCB1	CCB	04/01/20 1:21				U	mg/L		-0.02	0.02			
WG494707LFB	LFB	04/01/20 1:22	WI200331-15	2		2.011	mg/L	101	90	110			
WG493997PBS	PBS	04/01/20 1:23				U	mg/L		-0.02	0.02			
L57215-13DUP	DUP	04/01/20 1:32			U	U	mg/L				0	20	RA
WG494707CCV2	CCV	04/01/20 1:35	WI200331-17	2		2.017	mg/L	101	90	110			
WG494707CCB2	CCB	04/01/20 1:37				U	mg/L		-0.02	0.02			
WG494707CCV3	CCV	04/01/20 1:44	WI200331-17	2		2.029	mg/L	101	90	110			
WG494707CCB3	CCB	04/01/20 1:47				U	mg/L		-0.02	0.02			
WG494708													
WG494708CCV1	CCV	04/01/20 2:20	WI200331-17	2		2.026	mg/L	101	90	110			
WG494708CCB1	CCB	04/01/20 2:23				U	mg/L		-0.02	0.02			
WG494708LFB	LFB	04/01/20 2:24	WI200331-15	2		2.021	mg/L	101	90	110			
WG494001PBS	PBS	04/01/20 2:25				U	mg/L		-0.02	0.02			
WG494708CCV2	CCV	04/01/20 2:37	WI200331-17	2		2.049	mg/L	102	90	110			
WG494708CCB2	CCB	04/01/20 2:39				U	mg/L		-0.02	0.02			
WG494708CCV3	CCV	04/01/20 2:46	WI200331-17	2		2.047	mg/L	102	90	110			
WG494708CCB3	ССВ	04/01/20 2:49				U	mg/L		-0.02	0.02			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrite as N (MWMT)

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
	- туре	Analyzeu	T-CIN/3CIN	QC	Sample	Tounu	-omis	- Rec /	Lower	Opper	KPD		Quai
WG494450													
WG494450ICV	ICV	03/26/20 21:56	WI200213-7	.609		.624	mg/L	102	90	110			
WG494450ICB	ICB	03/26/20 21:57				U	mg/L		-0.01	0.01			
WG494452													
WG494452CCV1	CCV	03/26/20 23:28	WI200320-3	1		.965	mg/L	97	90	110			
WG494452CCB1	CCB	03/26/20 23:31				U	mg/L		-0.01	0.01			
WG494452LFB	LFB	03/26/20 23:32	WI191004-3	1		1.001	mg/L	100	90	110			
WG493948PBS	PBS	03/26/20 23:34				U	mg/L		-0.01	0.01			
WG494452CCV2	CCV	03/26/20 23:45	WI200320-3	1		.965	mg/L	97	90	110			
WG494452CCB2	CCB	03/26/20 23:48				U	mg/L		-0.01	0.01			
L57215-08DUP	DUP	03/26/20 23:55			U	U	mg/L				0	20	RA
WG494452CCV3	CCV	03/26/20 23:58	WI200320-3	1		.966	mg/L	97	90	110			
WG494452CCB3	CCB	03/27/20 0:01				U	mg/L		-0.01	0.01			
WG494705													
WG494705ICV	ICV	04/01/20 0:36	WI200213-7	.609		.618	mg/L	101	90	110			
WG494705ICB	ICB	04/01/20 0:37				U	mg/L		-0.01	0.01			
WG494707													
WG494707CCV1	CCV	04/01/20 1:18	WI200331-17	1		.996	mg/L	100	90	110			
WG494707CCB1	ССВ	04/01/20 1:21				U	mg/L		-0.01	0.01			
WG494707LFB	LFB	04/01/20 1:22	WI200331-15	1		1	mg/L	100	90	110			
WG493997PBS	PBS	04/01/20 1:23				U	mg/L		-0.01	0.01			
L57215-13DUP	DUP	04/01/20 1:32			U	U	mg/L				0	20	RA
WG494707CCV2	CCV	04/01/20 1:35	WI200331-17	1		.99	mg/L	99	90	110			
WG494707CCB2	CCB	04/01/20 1:37				U	mg/L		-0.01	0.01			
WG494707CCV3	CCV	04/01/20 1:44	WI200331-17	1		.997	mg/L	100	90	110			
WG494707CCB3	CCB	04/01/20 1:47				U	mg/L		-0.01	0.01			
WG494708													
WG494708CCV1	CCV	04/01/20 2:20	WI200331-17	1		1	mg/L	100	90	110			
WG494708CCB1	CCB	04/01/20 2:23				U	mg/L		-0.01	0.01			
WG494708LFB	LFB	04/01/20 2:24	WI200331-15	1		.989	mg/L	99	90	110			
WG494001PBS	PBS	04/01/20 2:25				U	mg/L		-0.01	0.01			
WG494708CCV2	CCV	04/01/20 2:37	WI200331-17	1		.934	mg/L	93	90	110			
WG494708CCB2	CCB	04/01/20 2:39				U	mg/L		-0.01	0.01			
WG494708CCV3	CCV	04/01/20 2:46	WI200331-17	1		.94	mg/L	94	90	110			
WG494708CCB3	CCB	04/01/20 2:49				U	mg/L		-0.01	0.01			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrogen, total Kjeldahl (MWMT)

M351.2 - Block Digestor

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494529													
WG494529ICV	ICV	03/28/20 19:28	WI200229-10	4		4.15	mg/L	104	90	110			
WG494529ICB	ICB	03/28/20 19:29				U	mg/L		-0.2	0.2			
WG494475PBS	PBS	03/28/20 19:30				U	%		-0.2	0.2			
WG494475LFB	LFB	03/28/20 19:31	WI200229-6	2.5		2.63	mg/L	105	90	110			
WG493948PBS	PBS	03/28/20 19:32				U	%		-0.2	0.2			
WG494529CCV1	CCV	03/28/20 19:41	WI200229-8	2.5		2.55	mg/L	102	90	110			
WG494529CCB1	CCB	03/28/20 19:43				U	mg/L		-0.2	0.2			
L57215-08DUP	DUP	03/28/20 19:46			U	U	mg/L				0	20	RA
WG494529CCV2	CCV	03/28/20 19:49	WI200229-8	2.5		2.57	mg/L	103	90	110			
WG494529CCB2	CCB	03/28/20 19:50				U	mg/L		-0.2	0.2			
WG495090													
WG495090ICV	ICV	04/07/20 23:48	WI200330-7	4		3.96	mg/L	99	90	110			
WG495090ICB	ICB	04/07/20 23:49				U	mg/L		-0.2	0.2			
WG494979PBS	PBS	04/07/20 23:50				U	%		-0.2	0.2			
WG494979LFB	LFB	04/07/20 23:51	WI200229-6	2.5		2.44	mg/L	98	90	110			
WG493997PBS	PBS	04/07/20 23:52				U	%		-0.2	0.2			
L57215-13MS	MS	04/07/20 23:59	WI200229-6	2.5	.2	2.94	mg/L	110	90	110			
L57215-13DUP	DUP	04/08/20 0:00			.2	.2	mg/L				0	20	RA
WG495090CCV1	CCV	04/08/20 0:01	WI200330-5	2.5		2.48	mg/L	99	90	110			
WG495090CCB1	CCB	04/08/20 0:02				U	mg/L		-0.2	0.2			
WG495090CCV2	CCV	04/08/20 0:08	WI200330-5	2.5		2.43	mg/L	97	90	110			
WG495090CCB2	CCB	04/08/20 0:09				U	mg/L		-0.2	0.2			
WG495092													
WG495092CCV1	CCV	04/08/20 0:14	WI200330-5	2.5		2.49	mg/L	100	90	110			
WG495092CCB1	CCB	04/08/20 0:15				U	mg/L		-0.2	0.2			
WG495032PBS	PBS	04/08/20 0:16				U	%		-0.2	0.2			
WG495032LFB	LFB	04/08/20 0:17	WI200229-6	2.5		2.46	mg/L	98	90	110			
WG494001PBS	PBS	04/08/20 0:18				U	%		-0.2	0.2			
L57215-17MS	MS	04/08/20 0:21	WI200229-6	2.5	U	2.79	mg/L	112	90	110			M1
WG495092CCV2	CCV	04/08/20 0:27	WI200330-5	2.5		2.42	mg/L	97	90	110			
WG495092CCB2	CCB	04/08/20 0:29				U	mg/L		-0.2	0.2			
WG494003PBS	PBS	04/08/20 0:33				U	%		-0.2	0.2			
WG495092CCV3	CCV	04/08/20 0:41	WI200330-5	2.5		2.46	mg/L	98	90	110			
WG495092CCB3	CCB	04/08/20 0:42				U	mg/L		-0.2	0.2			
L57217-11DUP	DUP	04/08/20 0:43			U	U	mg/L				0	20	RA
WG495092CCV4	CCV	04/08/20 0:46	WI200330-5	2.5		2.47	mg/L	99	90	110			
WG495092CCB4	CCB	04/08/20 0:47				U	mg/L		-0.2	0.2			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Ph** M9045D/M9040C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG492239													
L57215-08DUP	DUP	02/21/20 13:32			9.2	9.2	units				0	20	
L57215-13DUP	DUP	02/21/20 14:00			8.4	8.5	units				1	20	
WG492239CCV1	CCV	02/21/20 14:37	PCN58503	4		4.1	units	103	3.9	4.1			
WG492239CCV2	CCV	02/21/20 14:42	PCN58503	4		4.1	units	103	3.9	4.1			
WG492239CCV3	CCV	02/21/20 14:46	PCN58503	4		4.1	units	103	3.9	4.1			
WG492239ICV	ICV	02/21/20 15:05	PCN58503	4		4	units	100	3.9	4.1			
WG494692													
WG494692ICV	ICV	03/20/20 9:00	PCN58541	4		4	units	100	3.9	4.1			
WG493948PBS	PBS	03/20/20 10:00				6.2	units						
WG494692CCV	CCV	03/20/20 17:00	PCN58541	4		4	units	100	3.9	4.1			
WG494694													
WG494694ICV	ICV	03/25/20 1:08	PCN58541	4		4	units	100	3.9	4.1			
WG493997PBS	PBS	03/25/20 6:51				5.7	units						
WG494694CCV	CCV	03/27/20 15:59	PCN58541	4		4	units	100	3.9	4.1			
WG494888													
WG494001PBS	PBS	03/27/20 12:00				5.3	units						
WG494888ICV	ICV	03/27/20 12:00	PCN58541	4		4	units	100	3.9	4.1			
WG494888CCV	CCV	03/27/20 17:00	PCN58541	4		4.1	units	103	3.9	4.1			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus (MWMT) M6010D ICP

Pilospilorus (IVIV	V IVI I )		MOOTOD	101									
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	5.0075		5.11	mg/L	102	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.3	0.3			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.502		.51	mg/L	102	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	5.02		4.88	mg/L	97	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.3	0.3			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	1.004		1.01	mg/L	101	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	2.50375		2.57	mg/L	103	90	110			
WG494597CCB1	ССВ	03/30/20 23:31				U	mg/L		-0.3	0.3			
L57215-08SDL	SDL	03/30/20 23:35			U	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	1.004	U	1.09	mg/L	109	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	1.004	U	1.05	mg/L	105	75	125	4	20	
L57215-08DUP	DUP	03/30/20 23:46			U	U	mg/L				0	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	2.50375		2.57	mg/L	103	90	110			
WG494597CCB2	CCB	03/30/20 23:54				U	mg/L		-0.3	0.3			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	5.0075		5.26	mg/L	105	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.3	0.3			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.502		.49	mg/L	98	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	5.02		5.05	mg/L	101	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.3	0.3			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	1.004		1.03	mg/L	103	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	1.004	U	1.1	mg/L	110	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	1.004	U	1.1	mg/L	110	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			U	.13	mg/L				200	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	2.50375		2.68	mg/L	107	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.3	0.3			
L57215-14SDL	SDL	04/01/20 15:31			U	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	2.50375		2.56	mg/L	102	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.3	0.3			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	5.0075		5.1	mg/L	102	90	110			
WG494800ICB	ICB	04/02/20 8:56		0.00.0		U	mg/L	.02	-0.3	0.3			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.502		.5	mg/L	100	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	5.02		5.1	mg/L	102	80	120			
WG494001PBS	PBS	04/02/20 9:20		0.02		U	mg/L	.02	-0.3	0.3			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	1.004		1.08	mg/L	108	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	1.004	U	1.04	mg/L	104	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	II200302-4	1.004	U	1.12	mg/L	112	75 75	125	7	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	2.50375	-	2.57	mg/L	103	90	110	•	-	
WG494800CCB1	CCB	04/02/20 10:03				U	mg/L		-0.3	0.3			
L57217-02SDL	SDL	04/02/20 10:07			U	U	mg/L			0		10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	2.50375	ŭ	2.61	mg/L	104	90	110			
WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.3	0.3			
							J.						

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium (MWMT)

M6010D ICP

WG494597 CV   CV   G030020 22:20   12003156   20   19.66   mgL   98   90   110	ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597CBN	WG494597													
MGAB4697POV   POV   030302 022-28   120037-2   1	WG494597ICV	ICV	03/30/20 22:20	II200318-6	20		19.66	mg/L	98	90	110			
WG49459TICSAB         CISAB         03/30/20 22:-88         25 23         mgl.         101         80         120         FF         4 20         CIV         mgl.         100         80         120         FF         4 20         CIV         mgl.         100         80         120         FF         4 20         FF         4 20         FF         4 20         FF         4 20         8 20         20         10         8 0         100         8 0         110         CWG494897CCVT         CCV         03/30/20 23:37         120         99.5798         11         102.3         mgl.         10         75         125         10         10         11         10         mgl.         10         75         125         11         20         11         10         mgl.         10         75         125         11         20         11         10         10         75         125         11         20         11         10         10         75         125         11         20         10         10         10         75         125         11         20         10         10         10         10         10         10         10         10         10	WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.6	0.6			
WG493948ERS         PBS         03/30/20 22.82         U 99.5798         99.5798         O 80         120         C 1 80         0.8         120         C 1 80         120         C 1 80         C 1 80         120         C 1 80         Mg4 99.95798         Mg4 99.90         110         80         120         C 1 80         Mg4 99.90         110         T 5         125         125         125         125         125         125         125         125         125         125         125         120         120         Mg4 90         100         75         125         1         20         RA         100         Mg4 90         100         100         75         125         1         20         RA         100         Mg4 90         100         100         Mg4 90         100	WG494597PQV	PQV	03/30/20 22:28	11200327-2	1		1.02	mg/L	102	70	130			
WG49459FCCY1	WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	25		25.23	mg/L	101	80	120			
WG494597CCP1   CCV   03/30/20 23:27   1200318-5   10   98.55   mgl   99   90   110   10   10   10   10   1	WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.6	0.6			
WG494597CB1   CCB	WG493948LFB1	LFB	03/30/20 22:52	11200302-4	99.95798		99.53	mg/L	100	80	120			
L57215-08NSDL   SDL   03/30/20 23:35   1.1   1.0   mg/L   1.0   75   1.5   1.0   1	WG494597CCV1	CCV	03/30/20 23:27	II200318-5	10		9.85	mg/L	99	90	110			
L57215-08MS2	WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.6	0.6			
L57215-08MSD2	L57215-08SDL	SDL	03/30/20 23:35			1.1	U	mg/L					10	
L57215-08DUP   DUP   03/30/20 23:46   1200318-5   10   9.86   mgl   99   90   110   10   10   10   10   1	L57215-08MS2	MS	03/30/20 23:39	11200302-4	99.95798	1.1	102.3	mg/L	101	75	125			
WG494597CCV2         CCV         03/30/20 23:50         Il200318-5         10         9.86         mg/L         99         90         110         VICAURA START STA	L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	99.95798	1.1	101.4	mg/L	100	75	125	1	20	
WG494597CB2	L57215-08DUP	DUP	03/30/20 23:46			1.1	1.33	mg/L				19	20	RA
WG494738ICV         ICV         04/01/20 14:12         1200318-6         20         20.03         mg/L         100         90         110           WG494738ICV         ICV         04/01/20 14:15         1200318-6         20         20.03         mg/L         100         90         110           WG494738ICOR         ICB         04/01/20 14:19         1200401-5         1         1.05         mg/L         10         90         110           WG494738ICOR         ICAB         04/01/20 14:19         1200401-5         1         1.05         mg/L         10         80         120           WG493997PBS         PBS         04/01/20 14:44         1200302-4         99.95798         94.2         mg/L         94         80         120           L57215-13MSD2         MSD         04/01/20 15:07         1200302-4         99.95798         7         98.69         mg/L         99         75         125         1         20           L57215-13MSD2         MSD         04/01/20 15:07         1200302-4         99.95788         7         99.39         mg/L         99         75         125         1         20           L57215-13WSD2         DU         04/01/20 15:15         1200318-5         <	WG494597CCV2	CCV	03/30/20 23:50	II200318-5	10		9.86	mg/L	99	90	110			
WG494738ICV	WG494597CCB2	CCB	03/30/20 23:54				U	mg/L		-0.6	0.6			
WG494738 CB	WG494738													
WG494738PQV   PQV   04/01/20 14:19   1200401-5   1   1.05   mg/L   101   80   120	WG494738ICV	ICV	04/01/20 14:12	II200318-6	20		20.03	mg/L	100	90	110			
WG494738ICSAB         ICSAB         04/01/20 14:23         1200302-6         25         25.33         mg/L         101         80         120           WG493997PBS         PBS         04/01/20 14:40         1200302-4         99.95798         94.2         mg/L         94         80         120           L57215-13MSD2         MSD         04/01/20 15:17         11200302-4         99.95798         .7         98.69         mg/L         99         75         125         1         20           L57215-13MSD2         MSD         04/01/20 15:15         1020302-4         99.95798         .7         99.39         mg/L         99         75         125         1         20           L57215-13DUP         DUP         04/01/20 15:19         1200302-4         99.95798         .7         1.17         mg/L         99         75         125         1         20           L57215-13DUP         DUP         04/01/20 15:19         1200318-5         10         10.2         mg/L         102         90         110           WG494738CCB1         CCB         04/01/20 15:43         11200318-5         10         2.8         2.9         mg/L         96         90         110           WG494800CB <td>WG494738ICB</td> <td>ICB</td> <td>04/01/20 14:15</td> <td></td> <td></td> <td></td> <td>U</td> <td>mg/L</td> <td></td> <td>-0.6</td> <td>0.6</td> <td></td> <td></td> <td></td>	WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.6	0.6			
WG493997PBS	WG494738PQV	PQV	04/01/20 14:19	II200401-5	1		1.05	mg/L	105	70	130			
WG493997LFB1	WG494738ICSAB	ICSAB	04/01/20 14:23	II200302-6	25		25.33	mg/L	101	80	120			
L57215-13MS2 MS 04/01/20 15:07   I200302-4   99.95798   .7   98.69   mg/L   98   75   125   1   20   L57215-13MSD2 MSD 04/01/20 15:15   I200302-4   99.95798   .7   99.39   mg/L   99   75   125   1   20   L57215-13DUP DUP 04/01/20 15:15   .7   1.117   mg/L	WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.6	0.6			
L57215-13MSD2	WG493997LFB1	LFB	04/01/20 14:44	II200302-4	99.95798		94.2	mg/L	94	80	120			
L57215-13DUP   DUP   04/01/20 15:15   120318-5   10   10.2   mg/L   102   90   110	L57215-13MS2	MS	04/01/20 15:07	II200302-4	99.95798	.7	98.69	mg/L	98	75	125			
WG494738CCV1   CCV   04/01/20 15:19   1200318-5   10   10.2   mg/L   10.2   90   110   10.2	L57215-13MSD2	MSD	04/01/20 15:11	II200302-4	99.95798	.7	99.39	mg/L	99	75	125	1	20	
WG494738CCB1   CCB   04/01/20 15:23   U   mg/L   -0.6   0.6   0.6	L57215-13DUP	DUP	04/01/20 15:15			.7	1.17	mg/L				50	20	RA
L57215-14SDL SDL 04/01/20 15:31	WG494738CCV1	CCV	04/01/20 15:19	II200318-5	10		10.2	mg/L	102	90	110			
WG494738CCV2	WG494738CCB1	CCB	04/01/20 15:23				U	mg/L		-0.6	0.6			
WG494800  WG494800ICV ICV 04/02/20 8:52 II200318-6 20 19.87 mg/L 99 90 110  WG494800ICB ICB 04/02/20 8:56 U mg/L -0.6 0.6  WG494800ICB ICB 04/02/20 9:00 II200401-5 1 91 70 130  WG494800ICSAB ICSAB 04/02/20 9:04 II200302-6 25 25.88 mg/L 104 80 120  WG494001PBS PBS 04/02/20 9:20 U mg/L -0.6 0.6  WG494001LFB1 LFB 04/02/20 9:24 II200302-4 99.95798 100.7 mg/L 101 80 120  L57215-17MS2 MS 04/02/20 9:32 II200302-4 99.95798 9 100.4 mg/L 100 75 125  L57215-17MSD2 MSD 04/02/20 9:36 II200302-4 99.95798 9 100.9 mg/L 100 75 125  WG494800CCV1 CCV 04/02/20 10:00 II200318-5 10 9.93 mg/L 99 90 110  WG494800CCV2 CCV 04/02/20 10:23 II200318-5 10 9.91 mg/L 99 90 110	L57215-14SDL	SDL	04/01/20 15:31			2.8	2.95	mg/L				5	10	
WG494800ICV ICV 04/02/20 8:52 II200318-6 20 19.87 mg/L 99 90 110 WG494800ICB ICB 04/02/20 8:56 U	WG494738CCV2	CCV	04/01/20 15:43	II200318-5	10		9.57	mg/L	96	90	110			
WG494800ICV ICV 04/02/20 8:52 II200318-6 20 19.87 mg/L 99 90 110 WG494800ICB ICB 04/02/20 8:56 U mg/L -0.66 0.6 WG494800ICSAB ICSAB 04/02/20 9:00 II200401-5 1 91 70 130 WG494800ICSAB ICSAB 04/02/20 9:04 II200302-6 25 25.88 mg/L 104 80 120 WG494001PBS PBS 04/02/20 9:20 U mg/L -0.66 0.6 WG494001LFB1 LFB 04/02/20 9:24 II200302-4 99.95798 100.7 mg/L 101 80 120 L57215-17MSD2 MS 04/02/20 9:32 II200302-4 99.95798 9.9 100.4 mg/L 100 75 125 L57215-17MSD2 MSD 04/02/20 9:36 II200302-4 99.95798 9.9 100.9 mg/L 100 75 125 U mg/L -0.6 0.6 WG494800CCV1 CCV 04/02/20 10:00 II200318-5 10 9.93 mg/L 99 90 110 WG494800CCV2 CCV 04/02/20 10:03 II200318-5 10 9.91 mg/L 99 90 110	WG494738CCB2	CCB	04/01/20 15:47				U	mg/L		-0.6	0.6			
WG494800ICB         ICB         04/02/20 8:56         U         mg/L         -0.6         0.6           WG494800PQV         PQV         04/02/20 9:00         II200401-5         1         .91         mg/L         91         70         130           WG494800ICSAB         ICSAB         04/02/20 9:04         II200302-6         25         25.88         mg/L         104         80         120           WG494001PBS         PBS         04/02/20 9:20         U         mg/L         -0.6         0.6           WG494001LFB1         LFB         04/02/20 9:24         II200302-4         99.95798         100.7         mg/L         101         80         120           L57215-17MS2         MS         04/02/20 9:32         II200302-4         99.95798         .9         100.4         mg/L         100         75         125           L57215-17MSD2         MSD         04/02/20 9:36         II200302-4         99.95798         .9         100.9         mg/L         100         75         125         0         20           WG494800CCV1         CCV         04/02/20 10:00         II200318-5         10         9.93         mg/L         99         90         110           WG494800CCV2	WG494800													
WG494800PQV         PQV         04/02/20 9:00         II200401-5         1         .91         mg/L         91         70         130           WG494800ICSAB         ICSAB         04/02/20 9:04         II200302-6         25         25.88         mg/L         104         80         120           WG494001PBS         PBS         04/02/20 9:20         U         mg/L         -0.6         0.6           WG494001LFB1         LFB         04/02/20 9:24         II200302-4         99.95798         100.7         mg/L         101         80         120           L57215-17MS2         MS         04/02/20 9:32         II200302-4         99.95798         .9         100.4         mg/L         100         75         125           L57215-17MSD2         MSD         04/02/20 9:36         II200302-4         99.95798         .9         100.9         mg/L         100         75         125         0         20           WG494800CCV1         CCV         04/02/20 10:00         II200318-5         10         9.93         mg/L         99         90         110           WG494800CCV2         SDL         04/02/20 10:03         II200318-5         10         9.91         mg/L         99         90	WG494800ICV	ICV	04/02/20 8:52	II200318-6	20		19.87	mg/L	99	90	110			
WG494800ICSAB ICSAB 04/02/20 9:04 II200302-6 25 25.88 mg/L 104 80 120 WG494001PBS PBS 04/02/20 9:20 U mg/L -0.6 0.6 WG494001LFB1 LFB 04/02/20 9:24 II200302-4 99.95798 100.7 mg/L 101 80 120 L57215-17MS2 MS 04/02/20 9:32 II200302-4 99.95798 .9 100.4 mg/L 100 75 125 L57215-17MSD2 MSD 04/02/20 9:36 II200302-4 99.95798 .9 100.9 mg/L 100 75 125 UWG494800CCV1 CCV 04/02/20 10:00 II200318-5 10 9.93 mg/L 99 90 110 WG494800CCB1 CCB 04/02/20 10:03 U mg/L -0.6 0.6 L57217-02SDL SDL 04/02/20 10:03 II200318-5 10 9.91 mg/L 99 90 110	WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.6	0.6			
WG494001PBS       PBS       04/02/20 9:20       U       mg/L       -0.6       0.6         WG494001LFB1       LFB       04/02/20 9:24       II200302-4       99.95798       100.7       mg/L       101       80       120         L57215-17MS2       MS       04/02/20 9:32       II200302-4       99.95798       .9       100.4       mg/L       100       75       125         L57215-17MSD2       MSD       04/02/20 9:36       II200302-4       99.95798       .9       100.9       mg/L       100       75       125       0       20         WG494800CCV1       CCV       04/02/20 10:00       II200318-5       10       9.93       mg/L       99       90       110         WG494800CCB1       CCB       04/02/20 10:03       L       2       1.65       mg/L       -0.6       0.6         WG494800CCV2       CCV       04/02/20 10:23       II200318-5       10       9.91       mg/L       99       90       110	WG494800PQV	PQV	04/02/20 9:00	II200401-5	1		.91	mg/L	91	70	130			
WG494001LFB1 LFB 04/02/20 9:24 II200302-4 99.95798 100.7 mg/L 101 80 120 L57215-17MS2 MS 04/02/20 9:32 II200302-4 99.95798 .9 100.4 mg/L 100 75 125 L57215-17MSD2 MSD 04/02/20 9:36 II200302-4 99.95798 .9 100.9 mg/L 100 75 125 0 20 WG494800CCV1 CCV 04/02/20 10:00 II200318-5 10 9.93 mg/L 99 90 110 WG494800CCB1 CCB 04/02/20 10:03 U	WG494800ICSAB	ICSAB	04/02/20 9:04	II200302-6	25		25.88	mg/L	104	80	120			
L57215-17MS2 MS 04/02/20 9:32   200302-4   99.95798   .9    100.4   mg/L    100   75    125    L57215-17MSD2 MSD 04/02/20 9:36   1200302-4   99.95798   .9    100.9   mg/L    100   75    125    0    20    WG494800CCV1 CCV 04/02/20 10:00   1200318-5   10   9.93   mg/L   99   90   110    WG494800CCB1 CCB 04/02/20 10:03   U mg/L   -0.6   0.6    L57217-02SDL SDL 04/02/20 10:23   200318-5   10   9.91   mg/L   99   90   110    WG494800CCV2 CCV 04/02/20 10:23   1200318-5   10   9.91   mg/L   99   90   110	WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.6	0.6			
L57215-17MSD2 MSD 04/02/20 9:36 II200302-4 99.95798 .9 100.9 mg/L 100 75 125 0 20 WG494800CCV1 CCV 04/02/20 10:00 II200318-5 10 9.93 mg/L 99 90 110 WG494800CCB1 CCB 04/02/20 10:03 U mg/L -0.6 0.6 L57217-02SDL SDL 04/02/20 10:07 2 1.65 mg/L 10 9.91 mg/L 99 90 110 WG494800CCV2 CCV 04/02/20 10:23 II200318-5 10 9.91 mg/L 99 90 110	WG494001LFB1	LFB	04/02/20 9:24	II200302-4	99.95798		100.7	mg/L	101	80	120			
WG494800CCV1 CCV 04/02/20 10:00    1200318-5   10   9.93   mg/L   99   90   110	L57215-17MS2	MS	04/02/20 9:32	II200302-4	99.95798	.9	100.4	mg/L	100	75	125			
WG494800CCB1 CCB 04/02/20 10:03	L57215-17MSD2	MSD	04/02/20 9:36	II200302-4	99.95798	.9	100.9	mg/L	100	75	125	0	20	
L57217-02SDL SDL 04/02/20 10:07 2 1.65 mg/L 18 10 ZG WG494800CCV2 CCV 04/02/20 10:23 II200318-5 10 9.91 mg/L 99 90 110	WG494800CCV1	CCV	04/02/20 10:00	II200318-5	10		9.93	mg/L	99	90	110			
WG494800CCV2 CCV 04/02/20 10:23 II200318-5 10 9.91 mg/L 99 90 110	WG494800CCB1	CCB	04/02/20 10:03				U	mg/L		-0.6	0.6			
	L57217-02SDL	SDL	04/02/20 10:07			2	1.65	mg/L				18	10	ZG
WG494800CCB2 CCB 04/02/20 10:27 U mg/L -0.6 0.6	WG494800CCV2	CCV	04/02/20 10:23	II200318-5	10		9.91	mg/L	99	90	110			
• • • • • • • • • • • • • • • • • • • •	WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.6	0.6			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

#### Residue, Filterable (TDS) @180C (MWMT) SM2540C

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494446													
WG494446PBW	PBW	03/26/20 17:40				U	mg/L		-20	20			
WG494446LCSW	LCSW	03/26/20 17:42	PCN60944	1000		1010	mg/L	101	80	120			
WG493948PBS	PBS	03/26/20 17:45				U	mg/L		-40	40			
L57215-08DUP	DUP	03/26/20 18:10			226	246	mg/L				8	10	
WG494570													
WG494570PBW	PBW	03/30/20 11:23				U	mg/L		-20	20			
WG494570LCSW	LCSW	03/30/20 11:27	PCN60944	1000		1010	mg/L	101	80	120			
WG493997PBS	PBS	03/30/20 11:32				U	mg/L		-40	40			
L57215-13DUP	DUP	03/30/20 12:00			110	132	mg/L				18	10	RA
WG494730													
WG494730PBW	PBW	04/01/20 9:45				U	mg/L		-20	20			
WG494730LCSW	LCSW	04/01/20 9:48	PCN60937	1000		1090	mg/L	109	80	120			
WG494001PBS	PBS	04/01/20 9:52				U	mg/L		-40	40			
L57217-05DUP	DUP	04/01/20 10:30			330	318	mg/L				4	10	

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium (MWMT) M6020B ICP-MS

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.05071	mg/L	101	90	110			
WG494662ICB	ICB	03/31/20 12:33		.00		.00011	mg/L		-0.0003	0.0003			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.00025		.00026	mg/L	104	70	130			
WG494662ICSA	ICSA	03/31/20 12:36		.0001		.0001	mg/L		-0.0003	0.0003			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02		.01976	mg/L	99	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0003	0.0003			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05		.04792	mg/L	96	80	120			
L57215-13SDL	SDL	03/31/20 12:56			.0002	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05	.0002	.04861	mg/L	97	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05	.0002	.04823	mg/L	96	75	125	1	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.25		.2508	mg/L	100	90	110			
WG494662CCB1	ССВ	03/31/20 13:03				.00028	mg/L		-0.0003	0.0003			
L57215-13DUP	DUP	03/31/20 13:05			.0002	.00023	mg/L				14	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.25		.2444	mg/L	98	90	110			
WG494662CCB2	ССВ	03/31/20 13:14				.00022	mg/L		-0.0003	0.0003			
WG494716													
WG494716ICV	ICV	04/01/20 8:47	MS200331-1	.05		.04956	mg/L	99	90	110			
WG494716ICB	ICB	04/01/20 8:49		.00		.00011	mg/L	55	-0.0003	0.0003			
WG494716PQV	PQV	04/01/20 8:50	MS200327-4	.00025		.00027	mg/L	108	70	130			
WG494716ICSA	ICSA	04/01/20 8:52		.00023		.00027	mg/L	100	-0.0003	0.0003			
WG494716ICSAB	ICSAB	04/01/20 8:54	MS200203-2	.02		.01922	mg/L	96	80	120			
WG493948PBS	PBS	04/01/20 8:58	9200200 2	.02		.01922 U	mg/L	30	-0.0003	0.0003			
WG494716CCV1	CCV	04/01/20 0:30	MS200228-5	.25		.2481	mg/L	99	90	110			
WG494716CCB1	CCB	04/01/20 9:11	WI0200220 0	.20		.00015	mg/L	33	-0.0003	0.0003			
L57215-08SDL	SDL	04/01/20 9:19			.0005	.00013	mg/L		-0.0003	0.0003	20	10	ZG
L57215-08MS1	MS	04/01/20 9:21	MS200120-3	.05	.0005	.04461	mg/L	88	75	125	20	10	20
L57215-08MSD1	MSD	04/01/20 9:23	MS200120-3	.05	.0005	.04447	mg/L	88	75 75	125	0	20	
L57215-08DUP	DUP	04/01/20 9:24		.00	.0005	.00065	mg/L	00	70	120	26	20	RA
WG493948LFB2	LFB	04/01/20 9:26	MS200120-3	.05	.0000	.04505	mg/L	90	80	120	20	20	101
WG494716CCV2	CCV	04/01/20 9:28	MS200228-5	.25		.2479	mg/L	99	90	110			
WG494716CCB2	CCB	04/01/20 9:30		.20		.00015	mg/L	33	-0.0003	0.0003			
WG494824	002	0 1/0 1/20 0.00				.000.0	3		0.0000	0.0000			
	ICV	04/02/20 47:22	MC200221 1	0.E		05151	ma/l	102	00	110			
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05151	mg/L	103	90	110			
WG494824ICB	ICB	04/02/20 17:35	MS200327-4	00005		U	mg/L	404	-0.0003	0.0003			
WG494824PQV	PQV	04/02/20 17:37	W3200327-4	.00025		.00031	mg/L	124	70	130			
WG494824ICSA	ICSA	04/02/20 17:39	MS200203-2	.00018		.00018	mg/L	00	-0.0003	0.0003			
WG494824ICSAB	ICSAB	04/02/20 17:40	WI3200203-2	.02		.01981	mg/L	99	80	120			
WG494001PBS	PBS	04/02/20 17:44	MS200120 2	0.5		U 04007	mg/L	00	-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05	0000	.04907	mg/L	98	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05	.0002	.04778	mg/L	95	75 75	125	4	00	
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05	.0002	.04996	mg/L	100	75 00	125	4	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.25		.25089	mg/L	100	90	110			
WG494824CCB1	CCB	04/02/20 17:59			0045	U 0042	mg/L		-0.0003	0.0003	40	10	70
L57217-02SDL	SDL	04/02/20 18:04	Meannage E	0.5	.0015	.0013	mg/L	105	00	140	13	10	ZG
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.25		.26156	mg/L	105	90	110			
WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.0003	0.0003			
WG494001PBS	PBS	04/02/20 18:15	MS200120-3	O.F.		U 05110	mg/L	100	-0.0003	0.0003			
WG494001LFB2 WG494824CCV3	LFB CCV	04/02/20 18:17 04/02/20 18:21	MS200120-3 MS200228-5	.05 .25		.05119	mg/L mg/L	102 102	80 90	120 110			
	41055		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.20		.20490	g/L	102	90	110			6 of 25

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Inorganic QC Summary

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0003 0.0003

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver (MWMT) M6020B ICP-MS

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.02004		.02193	mg/L	109	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0003	0.0003			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.0005015		.00045	mg/L	90	70	130			
WG494662ICSA	ICSA	03/31/20 12:36				U	mg/L		-0.0005	0.0005			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.01002		.01023	mg/L	102	80	120			
WG493997PBS	PBS	03/31/20 12:44		.0.002		U	mg/L		-0.0003	0.0003			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.01002		.01058	mg/L	106	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.01002	U	.0103	mg/L	103	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.01002	U	.01032	mg/L	103	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.025075		.02581	mg/L	103	90	110			
WG494662CCB1	ССВ	03/31/20 13:03				U	mg/L		-0.0003	0.0003			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.025075		.02556	mg/L	102	90	110			
WG494662CCB2	ССВ	03/31/20 13:14				U	mg/L		-0.0003	0.0003			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.02004		.02096	mg/L	105	90	110			
WG494534ICB	ICB	03/31/20 13:16		.02004		.02030 U	mg/L	100	-0.0003	0.0003			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.0005015		.00043	mg/L	86	70	130			
WG494534ICSA	ICSA	03/31/20 13:23		.0000010		U	mg/L	00	-0.0005	0.0005			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.01002		.00946	mg/L	94	80	120			
WG493948PBS	PBS	03/31/20 13:32		.01002		U	mg/L	01	-0.0003	0.0003			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.025075		.02504	mg/L	100	90	110			
WG494534CCB1	ССВ	03/31/20 13:57				U	mg/L		-0.0003	0.0003			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L		0.0000	0.0000		10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.01002	U	.0096	mg/L	96	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.01002	U	.00967	mg/L	97	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			U	U	mg/L				0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.01002		.00979	mg/L	98	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.025075		.02497	mg/L	100	90	110			
WG494534CCB2	ССВ	03/31/20 14:24				U	mg/L		-0.0003	0.0003			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.02004		.02121	mg/L	106	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0003	0.0003			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.0005015		.00043	mg/L	86	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.0005	0.0005			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.01002		.00973	mg/L	97	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.01002		.0101	mg/L	101	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.01002	U	.00986	mg/L	98	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.01002	U	.00987	mg/L	99	75	125	0	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.025075		.02443	mg/L	97	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.0003	0.0003			
L57217-02SDL	SDL	04/02/20 18:04			U	U	mg/L					10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.025075		.02442	mg/L	97	90	110			
WG494824CCB2	ССВ	04/02/20 18:13				U	mg/L		-0.0003	0.0003			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.01002		.00997	mg/L	100	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.025075		.02463	mg/L	98	90	110			
L57215-20072	241055											2000 0	8 of 251

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0003 0.0003

Sodium (MWMT)	)		M6010D	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	100		98.79	mg/L	99	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.6	0.6			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.999		1.01	mg/L	101	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	24.975		25.4	mg/L	102	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.6	0.6			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	100.0046		98.88	mg/L	99	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	50		49.09	mg/L	98	90	110			
WG494597CCB1	ССВ	03/30/20 23:31				U	mg/L		-0.6	0.6			
L57215-08SDL	SDL	03/30/20 23:35			70.9	71.95	mg/L				1	10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	100.0046	70.9	172.2	mg/L	101	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	100.0046	70.9	171	mg/L	100	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			70.9	74.37	mg/L				5	20	
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	50		49.27	mg/L	99	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.6	0.6			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	100		99.28	mg/L	99	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.6	0.6			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.999		1.03	mg/L	103	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	24.975		25.23	mg/L	101	80	120			
WG493997PBS	PBS	04/01/20 14:40				.32	mg/L		-0.6	0.6			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	100.0046		93.65	mg/L	94	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	100.0046	21.8	120	mg/L	98	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	100.0046	21.8	120.7	mg/L	99	75	125	1	20	
L57215-13DUP	DUP	04/01/20 15:15			21.8	28.74	mg/L				27	20	RD
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	50		50.39	mg/L	101	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.6	0.6			
L57215-14SDL	SDL	04/01/20 15:31			17.8	18.2	mg/L				2	10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	50		47.53	mg/L	95	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.6	0.6			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	100		100.1	mg/L	100	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.6	0.6			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.999		1.02	mg/L	102	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	24.975		25.95	mg/L	104	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.6	0.6			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	100.0046		100.2	mg/L	100	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	100.0046	8.1	107.5	mg/L	99	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	100.0046	8.1	107.6	mg/L	99	75	125	0	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	50		50.06	mg/L	100	90	110			
WG494800CCB1	ССВ	04/02/20 10:03				U	mg/L		-0.6	0.6			
L57217-02SDL	SDL	04/02/20 10:07			45.6	46.65	mg/L				2	10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	50		49.81	mg/L	100	90	110			
WG494800CCB2	ССВ	04/02/20 10:27				U	mg/L		-0.6	0.6			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium (MWMT) M6010D ICP

Strontium (www.	'''		MOOTOD	101									
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.946	mg/L	97	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.027	0.027			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.045135		.0466	mg/L	103	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	.5015		.4794	mg/L	96	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.027	0.027			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	.5015		.4905	mg/L	98	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		.9722	mg/L	97	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.027	0.027			
L57215-08SDL	SDL	03/30/20 23:35			.048	.065	mg/L				35	10	ZG
L57215-08MS2	MS	03/30/20 23:39	11200302-4	.5015	.048	.547	mg/L	100	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	.5015	.048	.5423	mg/L	99	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			.048	.0575	mg/L				18	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		.9731	mg/L	97	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.027	0.027			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		2.002	mg/L	100	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.027	0.027			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.045135		.0402	mg/L	89	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	.5015		.4927	mg/L	98	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.027	0.027			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	.5015		.4736	mg/L	94	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	.5015	.036	.5387	mg/L	100	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	.5015	.036	.5422	mg/L	101	75	125	1	20	
L57215-13DUP	DUP	04/01/20 15:15			.036	.0448	mg/L				22	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		1.017	mg/L	102	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.027	0.027			
L57215-14SDL	SDL	04/01/20 15:31			.065	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.96	mg/L	96	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.027	0.027			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.93	mg/L	97	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.027	0.027			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.045135		.0484	mg/L	107	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	.5015		.4893	mg/L	98	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.027	0.027			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	.5015		.4917	mg/L	98	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	.5015	.017	.5009	mg/L	96	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	.5015	.017	.5024	mg/L	97	75	125	0	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1		.9672	mg/L	97	90	110			
WG494800CCB1	ССВ	04/02/20 10:03				U	mg/L		-0.027	0.027			
L57217-02SDL	SDL	04/02/20 10:07			.214	.233	mg/L				9	10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	1		.9622	mg/L	96	90	110	-	• •	
WG494800CCB2	ССВ	04/02/20 10:27				U	mg/L		-0.027	0.027			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate (MWMT)

D516-07 - Turbidimetric

Suitate (MWWINI)			D516-07 -	Turbiuiiii	euic								
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494485													
WG494485ICB	ICB	03/27/20 11:12				U	mg/L		-3	3			
WG494485ICV	ICV	03/27/20 11:12	WI200320-1	20		19.8	mg/L	99	90	110			
WG494485CCV1	CCV	03/27/20 11:40	WI200320-2	25		25	mg/L	100	90	110			
WG494485CCB1	ССВ	03/27/20 11:40				U	mg/L		-3	3			
WG494485LFB	LFB	03/27/20 11:40	WI190801-3	10.01		9.3	mg/L	93	90	110			
WG493240PBS	PBS	03/27/20 11:40				U	mg/L		-3	3			
WG494485CCV2	CCV	03/27/20 11:42	WI200320-2	25		25.1	mg/L	100	90	110			
WG494485CCB2	ССВ	03/27/20 11:42				U	mg/L		-3	3			
WG493948PBS	PBS	03/27/20 11:42				U	mg/L		-3	3			
WG494485CCV3	CCV	03/27/20 11:43	WI200320-2	25		24.7	mg/L	99	90	110			
WG494485CCB3	ССВ	03/27/20 11:43				U	mg/L		-3	3			
WG494485CCV4	CCV	03/27/20 11:44	WI200320-2	25		24.6	mg/L	98	90	110			
WG494485CCB4	ССВ	03/27/20 11:44				U	mg/L		-3	3			
WG494485CCV5	CCV	03/27/20 11:49	WI200320-2	25		24.6	mg/L	98	90	110			
WG494485CCB5	ССВ	03/27/20 11:49				U	mg/L		-3	3			
L57215-08AS	AS	03/27/20 11:50	SO4TURB5X	10	31.7	39.9	mg/L	82	90	110			M2
WG494485CCV6	CCV	03/27/20 11:51	WI200320-2	25		24.9	mg/L	100	90	110			
WG494485CCB6	ССВ	03/27/20 11:51				2	mg/L		-3	3			
WG494485CCV7	CCV	03/27/20 12:22	WI200320-2	25		24.5	mg/L	98	90	110			
WG494485CCB7	ССВ	03/27/20 12:22				U	mg/L		-3	3			
WG494485CCV8	CCV	03/27/20 12:23	WI200320-2	25		24.9	mg/L	100	90	110			
WG494485CCB8	ССВ	03/27/20 12:23				U	mg/L		-3	3			
WG494485CCV9	CCV	03/27/20 12:29	WI200320-2	25		24.6	mg/L	98	90	110			
WG494485CCB9	CCB	03/27/20 12:29				U	mg/L		-3	3			
WG494485CCV10	CCV	03/27/20 12:30	WI200320-2	25		24.8	mg/L	99	90	110			
WG494485CCB10	CCB	03/27/20 12:30				U	mg/L		-3	3			
WG494485CCV11	CCV	03/27/20 14:47	WI200320-2	25		24.5	mg/L	98	90	110			
WG494485CCB11	CCB	03/27/20 14:47				U	mg/L		-3	3			
L57215-08DUP	DUP	03/27/20 14:47			31.7	35.8	mg/L				12	20	
L57215-08AS	AS	03/27/20 14:47	SO4TURB5X	10	31.7	39.9	mg/L	82	90	110			
WG494485CCV12	CCV	03/27/20 14:48	WI200320-2	25		24.8	mg/L	99	90	110			
WG494485CCB12	CCB	03/27/20 14:48				U	mg/L		-3	3			
WG494723													
WG494723ICB	ICB	04/01/20 9:34				U	mg/L		-3	3			
WG494723ICV	ICV	04/01/20 9:34	WI200320-1	20		19.2	mg/L	96	90	110			
WG494723CCV1	CCV	04/01/20 9:43	WI200320-2	25		24.9	mg/L	100	90	110			
WG494723CCB1	ССВ	04/01/20 9:43				U	mg/L		-3	3			
WG494723LFB	LFB	04/01/20 9:43	WI190801-3	10.01		9.7	mg/L	97	90	110			
WG493354PBS	PBS	04/01/20 9:43				U	mg/L		-3	3			
WG493997PBS	PBS	04/01/20 9:43				U	mg/L		-3	3			
L57215-13AS	AS	04/01/20 9:43	WI190801-3	10.01	20	30.2	mg/L	102	90	110			
WG494723CCV2	CCV	04/01/20 9:45	WI200320-2	25		24.6	mg/L	98	90	110			
WG494723CCB2	ССВ	04/01/20 9:45				U	mg/L		-3	3			
L57215-13DUP	DUP	04/01/20 9:45			20	20	mg/L		-	•	0	20	
WG494723CCV3	CCV	04/01/20 9:46	WI200320-2	25		24.7	mg/L	99	90	110	-		
WG494723CCB3	ССВ	04/01/20 9:46				U	mg/L		-3	3			
WG494723CCV4	CCV	04/01/20 10:08	WI200320-2	25		24.7	mg/L	99	90	110			
WG494723CCB4	ССВ	04/01/20 10:08				U	mg/L		-3	3			
WG494723CCV5	CCV	04/01/20 10:09	WI200320-2	25		24.5	mg/L	98	90	110			
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WG494723CCB5	CCB	04/01/20 10:09				U	mg/L		-3	3			
WG494726													
VG494726ICB	ICB	04/01/20 9:34				U	mg/L		-3	3			
/G494726ICV	ICV	04/01/20 9:34	WI200320-1	20		19.2	mg/L	96	90	110			
/G494726CCV1	CCV	04/01/20 10:20	WI200320-2	25		25	mg/L	100	90	110			
G494726CCB1	CCB	04/01/20 10:20				U	mg/L		-3	3			
/G494726LFB	LFB	04/01/20 10:20	WI190801-3	10.01		9.6	mg/L	96	90	110			
/G494001PBS	PBS	04/01/20 10:20				U	mg/L		-3	3			
/G494075PBS	PBS	04/01/20 10:20				U	mg/L		-3	3			M
/G494726CCV2	CCV	04/01/20 10:21	WI200320-2	25		24.6	mg/L	98	90	110			
/G494726CCB2	CCB	04/01/20 10:21				U	mg/L		-3	3			
VG494726CCV3	CCV	04/01/20 10:52	WI200320-2	25		24.6	mg/L	98	90	110			
VG494726CCB3	CCB	04/01/20 10:52				U	mg/L		-3	3			
57922-01DUP	DUP	04/01/20 10:52			381	393	mg/L				3	20	
57922-02AS	AS	04/01/20 10:52	SO4TURB40X	9.99	554	554	mg/L	0	90	110			M3
VG494726CCV4	CCV	04/01/20 10:53	WI200320-2	25		24.5	mg/L	98	90	110			
VG494726CCB4	CCB	04/01/20 10:53				U	mg/L		-3	3			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium (MWMT) M6020B ICP-MS

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
	Турс	Anaryzou	1 011/0011	40	Gampie	Tourid	Onito	110071	Lower	Оррсі	141 5		Quui
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.05059	mg/L	101	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0003	0.0003			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.000501		.00049	mg/L	98	70	130			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02004		.02118	mg/L	106	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0003	0.0003			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.0501		.04814	mg/L	96	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.0501	U	.04897	mg/L	98	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.0501	U	.04886	mg/L	98	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1002		.10069	mg/L	100	90	110			
WG494662CCB1	CCB	03/31/20 13:03				U	mg/L		-0.0003	0.0003			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.1002		.09982	mg/L	100	90	110			
WG494662CCB2	CCB	03/31/20 13:14				U	mg/L		-0.0003	0.0003			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.05133	mg/L	103	90	110			
WG494534ICB	ICB	03/31/20 13:16	WO200210 2	.03		.03133	mg/L	103	-0.0003	0.0003			
WG494534PQV	PQV		MS200327-4	000501		.00046		92	-0.0003 70	130			
		03/31/20 13:19		.000501			mg/L						
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02004		.01852	mg/L	92	80	120			
WG493948PBS	PBS	03/31/20 13:32	M0000000 F	4000		U	mg/L	400	-0.0003	0.0003			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1002		.102	mg/L	102	90	110			
WG494534CCB1	ССВ	03/31/20 13:57				U	mg/L		-0.0003	0.0003			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L					10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.0501	U	.04997	mg/L	100	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.0501	U	.05064	mg/L	101	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			U	U	mg/L				0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.0501		.04948	mg/L	99	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1002		.1023	mg/L	102	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0003	0.0003			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05504	mg/L	110	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0003	0.0003			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.000501		.00053	mg/L	106	70	130			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02004		.02129	mg/L	106	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.0501		.05227	mg/L	104	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.0501	U	.05068	mg/L	101	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.0501	U	.05209	mg/L	104	75	125	3	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1002		.10066	mg/L	100	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.0003	0.0003			
L57217-02SDL	SDL	04/02/20 18:04			U	U	mg/L					10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1002	ū	.10097	mg/L	101	90	110		. •	
WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.0003	0.0003			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.0501		.05237	mg/L	105	80	120			
WG494824CCV3	CCV	04/02/20 18:17	MS200228-5	.1002		.10141	mg/L	103	90	110			
WG494824CCB3	CCB	04/02/20 18:21		.1002		. 10141 U	mg/L	101	-0.0003	0.0003			
	000	0-102/20 10.22				<u> </u>	9/_		0.0000	0.0000			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thorium (MWMT) M6020B ICP-MS

THOTIUM (WWW)			WIOOZOBT										
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.0498	mg/L	100	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.003	0.003			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.005		.0043	mg/L	86	70	130			
WG494662ICSA	ICSA	03/31/20 12:36				U	mg/L		-0.005	0.005			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.05		.0545	mg/L	109	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.003	0.003			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05		.0484	mg/L	97	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05	U	.05	mg/L	100	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05	U	.0512	mg/L	102	75	125	2	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1		.1011	mg/L	101	90	110			
WG494662CCB1	CCB	03/31/20 13:03				U	mg/L		-0.003	0.003			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.1		.0996	mg/L	100	90	110			
WG494662CCB2	CCB	03/31/20 13:14				U	mg/L		-0.003	0.003			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.0493	mg/L	99	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.003	0.003			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.005		.0041	mg/L	82	70	130			
WG494534ICSA	ICSA	03/31/20 13:23				U	mg/L		-0.005	0.005			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.05		.0521	mg/L	104	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.003	0.003			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1		.1008	mg/L	101	90	110			
WG494534CCB1	ССВ	03/31/20 13:57				U	mg/L		-0.003	0.003			
L57215-08SDL	SDL	03/31/20 14:06			U	U	mg/L					10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05	U	.0509	mg/L	102	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05	U	.0514	mg/L	103	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			U	U	mg/L				0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05		.0494	mg/L	99	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1		.1006	mg/L	101	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.003	0.003			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.0531	mg/L	106	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.003	0.003			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.005		.0046	mg/L	92	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.005	0.005			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.05		.0535	mg/L	107	80	120			
WG494001PBS	PBS	04/02/20 17:44				U	mg/L		-0.003	0.003			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05		.0508	mg/L	102	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05	U	.0515	mg/L	103	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.05	U	.0514	mg/L	103	75	125	0	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1		.0998	mg/L	100	90	110			
WG494824CCB1	ССВ	04/02/20 17:59				U	mg/L		-0.003	0.003			
L57217-02SDL	SDL	04/02/20 18:04			U	U	mg/L					10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1		.1026	mg/L	103	90	110			
WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.003	0.003			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.003	0.003			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05		.0516	mg/L	103	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1		.1018	mg/L	102	90	110			
L57215-20072	241055	)									Pa	age 10	4 of 25

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.003 0.003

Tin (MWMT)			M6010D	ICP									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		2.055	mg/L	103	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.12	0.12			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.2004		.211	mg/L	105	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	2.505		2.447	mg/L	98	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.12	0.12			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	1.002		1.019	mg/L	102	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		1.045	mg/L	105	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.12	0.12			
L57215-08SDL	SDL	03/30/20 23:35			U	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	1.002	U	1.048	mg/L	105	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	1.002	U	1.033	mg/L	103	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			U	U	mg/L				0	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		1.051	mg/L	105	90	110			
WG494597CCB2	ССВ	03/30/20 23:54				U	mg/L		-0.12	0.12			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		2.086	mg/L	104	90	110			
WG494738ICB	ICB	04/01/20 14:15	2000.00	2		2.000 U	mg/L	104	-0.12	0.12			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.2004		.191	mg/L	95	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:19	11200302-6	2.505		2.509	mg/L	100	80	120			
WG494730ICSAB WG493997PBS	PBS	04/01/20 14:23	11200002 0	2.505		2.309 U	mg/L	100	-0.12	0.12			
WG493997FB3 WG493997LFB1	LFB	04/01/20 14:40	11200302-4	1.002		1.012	mg/L	101	-0.12 80				
L57215-13MS2	MS		11200302-4		- 11		mg/L	101 101		120			
	MSD	04/01/20 15:07	11200302-4	1.002	U	1.011	-		75 75	125	4	20	
L57215-13MSD2		04/01/20 15:11	11200302-4	1.002	U	1.021 U	mg/L mg/L	102	75	125	1 0	20	DΛ
L57215-13DUP	DUP	04/01/20 15:15	II200318-5	4	U		-	107	90	110	U	20	RA
WG494738CCV1	CCV CCB	04/01/20 15:19	11200316-3	1		1.067 U	mg/L	107		110			
WG494738CCB1	SDL	04/01/20 15:23			U	U	mg/L		-0.12	0.12		10	
L57215-14SDL		04/01/20 15:31	II200318-5	4	U		mg/L	100	00	110		10	
WG494738CCV2	CCV	04/01/20 15:43	11200316-3	1		1.002	mg/L	100	90	110			
WG494738CCB2	CCB	04/01/20 15:47				U	mg/L		-0.12	0.12			
WG494800							_						
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		2.036	mg/L	102	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.12	0.12			
WG494800PQV	PQV	04/02/20 9:00	II200401-5	.2004		.232	mg/L	116	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	2.505		2.508	mg/L	100	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.12	0.12			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	1.002		1.06	mg/L	106	80	120			
L57215-17MS2	MS	04/02/20 9:32	11200302-4	1.002	U	.999	mg/L	100	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	1.002	U	1.044	mg/L	104	75	125	4	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1		1.04	mg/L	104	90	110			
WG494800CCB1	CCB	04/02/20 10:03				U	mg/L		-0.12	0.12			
L57217-02SDL	SDL	04/02/20 10:07			U	U	mg/L					10	
WG494800CCV2	CCV	04/02/20 10:23	II200318-5	1		1.034	mg/L	103	90	110			
WG494800CCB2	CCB	04/02/20 10:27				U	mg/L		-0.12	0.12			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium (MWMT) M6010D ICP

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494597													
WG494597ICV	ICV	03/30/20 22:20	II200318-6	2		1.839	mg/L	92	90	110			
WG494597ICB	ICB	03/30/20 22:24				U	mg/L		-0.015	0.015			
WG494597PQV	PQV	03/30/20 22:28	11200327-2	.024925		.0246	mg/L	99	70	130			
WG494597ICSAB	ICSAB	03/30/20 22:32	11200302-6	.4985		.4821	mg/L	97	80	120			
WG493948PBS	PBS	03/30/20 22:48				U	mg/L		-0.015	0.015			
WG493948LFB1	LFB	03/30/20 22:52	11200302-4	.997		.9303	mg/L	93	80	120			
WG494597CCV1	CCV	03/30/20 23:27	II200318-5	1		.9255	mg/L	93	90	110			
WG494597CCB1	CCB	03/30/20 23:31				U	mg/L		-0.015	0.015			
L57215-08SDL	SDL	03/30/20 23:35			U	U	mg/L					10	
L57215-08MS2	MS	03/30/20 23:39	11200302-4	.997	U	.9463	mg/L	95	75	125			
L57215-08MSD2	MSD	03/30/20 23:43	11200302-4	.997	U	.9364	mg/L	94	75	125	1	20	
L57215-08DUP	DUP	03/30/20 23:46			U	U	mg/L				0	20	RA
WG494597CCV2	CCV	03/30/20 23:50	II200318-5	1		.9303	mg/L	93	90	110			
WG494597CCB2	CCB	03/30/20 23:54				U	mg/L		-0.015	0.015			
WG494738													
WG494738ICV	ICV	04/01/20 14:12	II200318-6	2		1.88	mg/L	94	90	110			
WG494738ICB	ICB	04/01/20 14:15				U	mg/L		-0.015	0.015			
WG494738PQV	PQV	04/01/20 14:19	II200401-5	.024925		.0219	mg/L	88	70	130			
WG494738ICSAB	ICSAB	04/01/20 14:23	11200302-6	.4985		.4937	mg/L	99	80	120			
WG493997PBS	PBS	04/01/20 14:40				U	mg/L		-0.015	0.015			
WG493997LFB1	LFB	04/01/20 14:44	11200302-4	.997		.9213	mg/L	92	80	120			
L57215-13MS2	MS	04/01/20 15:07	11200302-4	.997	U	.9397	mg/L	94	75	125			
L57215-13MSD2	MSD	04/01/20 15:11	11200302-4	.997	U	.9431	mg/L	95	75	125	0	20	
L57215-13DUP	DUP	04/01/20 15:15			U	U	mg/L				0	20	RA
WG494738CCV1	CCV	04/01/20 15:19	II200318-5	1		.9711	mg/L	97	90	110			
WG494738CCB1	ССВ	04/01/20 15:23				U	mg/L		-0.015	0.015			
L57215-14SDL	SDL	04/01/20 15:31			U	U	mg/L					10	
WG494738CCV2	CCV	04/01/20 15:43	II200318-5	1		.9133	mg/L	91	90	110			
WG494738CCB2	ССВ	04/01/20 15:47				U	mg/L		-0.015	0.015			
WG494800													
WG494800ICV	ICV	04/02/20 8:52	II200318-6	2		1.822	mg/L	91	90	110			
WG494800ICB	ICB	04/02/20 8:56				U	mg/L		-0.015	0.015			
WG494800PQV	PQV	04/02/20 9:00	11200401-5	.024925		.0265	mg/L	106	70	130			
WG494800ICSAB	ICSAB	04/02/20 9:04	11200302-6	.4985		.4812	mg/L	97	80	120			
WG494001PBS	PBS	04/02/20 9:20				U	mg/L		-0.015	0.015			
WG494001LFB1	LFB	04/02/20 9:24	11200302-4	.997		.9315	mg/L	93	80	120			
L57215-17MS2	MS	04/02/20 9:32	II200302-4	.997	U	.9174	mg/L	92	75	125			
L57215-17MSD2	MSD	04/02/20 9:36	11200302-4	.997	U	.9288	mg/L	93	75	125	1	20	
WG494800CCV1	CCV	04/02/20 10:00	II200318-5	1	ŭ	.9261	mg/L	93	90	110	•		
WG494800CCB1	CCB	04/02/20 10:03		•		.3201 U	mg/L	00	-0.015	0.015			
L57217-02SDL	SDL	04/02/20 10:07			U	U	mg/L		0.010	0.010		10	
			II200318-5	1	U			92	90	110		10	
				'				52					
WG494800CCV2 WG494800CCB2	CCV	04/02/20 10:23 04/02/20 10:27	II200318-5	1		.921 U	mg/L mg/L	92	90 -0.015	110 0.015			

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ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium (MWMT) M6020B ICP-MS

Oranium (WWW)	,		M0020B I	CF-IVIS									
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.05028	mg/L	101	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0003	0.0003			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.0005		.00049	mg/L	98	70	130			
WG494662ICSA	ICSA	03/31/20 12:36		.0000		U	mg/L	00	-0.0005	0.0005			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02		.02245	mg/L	112	80	120			
WG493997PBS	PBS	03/31/20 12:44		.02		U	mg/L		-0.0003	0.0003			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05		.04791	mg/L	96	80	120			
L57215-13SDL	SDL	03/31/20 12:56		.00	.0009	.001	mg/L	00	00	120	11	10	ZG
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05	.0009	.05104	mg/L	100	75	125		10	20
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05	.0009	.05095	mg/L	100	75 75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1	.0003	.10036	mg/L	100	90	110	O	20	
WG494662CCB1	CCB	03/31/20 13:01	WIG200220 0	.1		. 10030	mg/L	100	-0.0003	0.0003			
L57215-13DUP	DUP	03/31/20 13:05			.0009	.00187	mg/L		-0.0003	0.0003	70	20	RA
WG494662CCV2	CCV	03/31/20 13:03	MS200228-5	.1	.0009	.10041	mg/L	100	90	110	70	20	IVA
	CCB		WO200220-3	.1		.10041 U	mg/L	100	-0.0003				
WG494662CCB2	ССВ	03/31/20 13:14				U	IIIg/L		-0.0003	0.0003			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.05037	mg/L	101	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.0003	0.0003			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.0005		.00044	mg/L	88	70	130			
WG494534ICSA	ICSA	03/31/20 13:23				U	mg/L		-0.0005	0.0005			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02		.01883	mg/L	94	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0003	0.0003			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1		.102	mg/L	102	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0003	0.0003			
L57215-08SDL	SDL	03/31/20 14:06			.0024	.0022	mg/L				8	10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05	.0024	.05339	mg/L	102	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05	.0024	.05417	mg/L	104	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			.0024	.00176	mg/L				31	20	RD
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05		.04964	mg/L	99	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1		.1023	mg/L	102	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0003	0.0003			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.0537	mg/L	107	90	110			
WG494824ICB	ICB	04/02/20 17:35		.00		U	mg/L	101	-0.0003	0.0003			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.0005		.00052	mg/L	104	70	130			
WG494824ICSA	ICSA	04/02/20 17:39		.0000		U	mg/L	104	-0.0005	0.0005			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02		.02082	mg/L	104	80	120			
WG494001PBS	PBS	04/02/20 17:44	0200200 2	.02		.02002 U	mg/L	104	-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 17:44	MS200120-3	.05		.05067	mg/L	101	80	120			
	MS		MS200120-3		0002	.05032	mg/L						
L57215-17MS1	MSD	04/02/20 17:50	MS200120-3	.05	.0002			100	75 75	125	2	20	
L57215-17MSD1		04/02/20 17:52		.05	.0002	.05159	mg/L	103	75 00	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.1		.10025	mg/L	100	90	110			
WG494824CCB1	CCB	04/02/20 17:59			0040	U 0012	mg/L		-0.0003	0.0003	0	40	
L57217-02SDL	SDL	04/02/20 18:04	M8200229 F	4	.0012	.0012	mg/L	404	00	440	0	10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1		.10392	mg/L	104	90	110			
WG494824CCB2	CCB	04/02/20 18:13				U	mg/L		-0.0003	0.0003			
WG494001PBS	PBS	04/02/20 18:15	M0000400 0	65		U	mg/L	40-	-0.0003	0.0003			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05		.05226	mg/L	105	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1		.10272	mg/L	103	90	110			

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Inorganic QC Summary

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 U mg/L -0.0003 0.0003

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Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium (MWMT) M6020B ICP-MS

vanadium (www	"''		1V10U2UB 1	CF-IVIS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.04942	mg/L	99	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.0015	0.0015			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.002		.00191	mg/L	96	70	130			
WG494662ICSA	ICSA	03/31/20 12:36				U	mg/L		-0.002	0.002			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02		.02116	mg/L	106	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.0015	0.0015			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.05		.0499	mg/L	100	80	120			
L57215-13SDL	SDL	03/31/20 12:56			.0265	.0307	mg/L				16	10	ZH
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.05	.0265	.07943	mg/L	106	75	125		.0	
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.05	.0265	.07929	mg/L	106	75	125	0	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.1	.0200	.10089	mg/L	101	90	110	O	20	
WG494662CCB1	CCB	03/31/20 13:01		.,		.10003	mg/L	101	-0.0015	0.0015			
L57215-13DUP	DUP	03/31/20 13:05			.0265	.04736	mg/L		-0.0013	0.0013	56	20	RD
WG494662CCV2	CCV	03/31/20 13:03	MS200228-5	.1	.0203	.09867	mg/L	99	90	110	30	20	ND
WG494662CCB2	CCB		WIG200220 0	.!		.0900 <i>1</i>	mg/L	99	-0.0015	0.0015			
	ССВ	03/31/20 13:14				U	IIIg/L		-0.0015	0.0015			
WG494534													
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.0457	mg/L	91	90	110			
WG494534ICB	ICB	03/31/20 13:16				U	mg/L		-0.0015	0.0015			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.002		.00181	mg/L	91	70	130			
WG494534ICSA	ICSA	03/31/20 13:23				U	mg/L		-0.002	0.002			
WG494534ICSAB	ICSAB	03/31/20 13:26	MS200203-2	.02		.01746	mg/L	87	80	120			
WG493948PBS	PBS	03/31/20 13:32				U	mg/L		-0.0015	0.0015			
WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.1		.09468	mg/L	95	90	110			
WG494534CCB1	CCB	03/31/20 13:57				U	mg/L		-0.0015	0.0015			
L57215-08SDL	SDL	03/31/20 14:06			.2316	.2111	mg/L				9	10	
L57215-08MS1	MS	03/31/20 14:09	MS200120-3	.05	.2316	.2725	mg/L	82	75	125			
L57215-08MSD1	MSD	03/31/20 14:12	MS200120-3	.05	.2316	.27	mg/L	77	75	125	1	20	
L57215-08DUP	DUP	03/31/20 14:15			.2316	.222	mg/L				4	20	
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.05		.04592	mg/L	92	80	120			
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.1		.09597	mg/L	96	90	110			
WG494534CCB2	CCB	03/31/20 14:24				U	mg/L		-0.0015	0.0015			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.05	mg/L	100	90	110			
WG494824ICB	ICB	04/02/20 17:35				U	mg/L		-0.0015	0.0015			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.002		.00171	mg/L	86	70	130			
WG494824ICSA	ICSA	04/02/20 17:39				U	mg/L		-0.002	0.002			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02		.01899	mg/L	95	80	120			
WG494001PBS	PBS	04/02/20 17:44		.02		U	mg/L	00	-0.0015	0.0015			
WG494001LFB2	LFB	04/02/20 17:46	MS200120-3	.05		.04911	mg/L	98	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.05	.0129	.06185	mg/L	98	75	125			
L57215-17MSD1	MSD	04/02/20 17:50	MS200120-3 MS200120-3	.05	.0129	.06276	mg/L	100	75 75	125	1	20	
WG494824CCV1	CCV	04/02/20 17:52	MS200120-3 MS200228-5	.05 .1	.0128	.10178	mg/L	100	90	110	'	20	
WG494824CCV1 WG494824CCB1	CCB	04/02/20 17:59		. 1		.10176 U	mg/L	102	-0.0015	0.0015			
L57217-02SDL	SDL	04/02/20 17:59			.1027	.09995	mg/L		-0.0013	0.0013	3	10	
			MS200228 5	4	. 1027			100	00	110	3	10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.1		.10246	mg/L	102	90	110			
WG494824CCB2	CCB	04/02/20 18:13				.00062	mg/L		-0.0015	0.0015			
WG494001PBS	PBS	04/02/20 18:15	M8200422 2	0.5		U	mg/L	404	-0.0015	0.0015			
WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.05		.05051	mg/L	101	80	120			
WG494824CCV3	CCV	04/02/20 18:21	MS200228-5	.1		.10051	mg/L	101	90	110			

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### Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG494824CCB3 CCB 04/02/20 18:22 .0006 mg/L -0.0015 0.0015

Zinc (MWMT)			M6020B	ICP-MS									
ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494662													
WG494662ICV	ICV	03/31/20 12:31	MS200331-1	.05		.0508	mg/L	102	90	110			
WG494662ICB	ICB	03/31/20 12:33				U	mg/L		-0.018	0.018			
WG494662PQV	PQV	03/31/20 12:35	MS200327-4	.0150225		.0148	mg/L	99	70	130			
WG494662ICSAB	ICSAB	03/31/20 12:38	MS200203-2	.02003		.0238	mg/L	119	80	120			
WG493997PBS	PBS	03/31/20 12:44				U	mg/L		-0.018	0.018			
WG493997LFB2	LFB	03/31/20 12:45	MS200120-3	.050075		.0537	mg/L	107	80	120			
L57215-13SDL	SDL	03/31/20 12:56			U	U	mg/L					10	
L57215-13MS1	MS	03/31/20 12:58	MS200120-3	.050075	U	.054	mg/L	108	75	125			
L57215-13MSD1	MSD	03/31/20 13:00	MS200120-3	.050075	U	.0536	mg/L	107	75	125	1	20	
WG494662CCV1	CCV	03/31/20 13:01	MS200228-5	.50075		.5106	mg/L	102	90	110			
WG494662CCB1	ССВ	03/31/20 13:03				U	mg/L		-0.018	0.018			
L57215-13DUP	DUP	03/31/20 13:05			U	U	mg/L				0	20	RA
WG494662CCV2	CCV	03/31/20 13:12	MS200228-5	.50075	Ū	.5099	mg/L	102	90	110	Ü		
WG494662CCB2	CCB	03/31/20 13:14		.00070		U	mg/L	102	-0.018	0.018			
WG494534	002	00/01/20 10111					Ü		0.0.0	0.0.0			
WG494534ICV	ICV	03/31/20 13:13	MS200210-2	.05		.0454	mg/L	91	90	110			
WG494534ICB	ICB	03/31/20 13:16		.00		.0404 U	mg/L	31	-0.018	0.018			
WG494534PQV	PQV	03/31/20 13:19	MS200327-4	.0150225		.014	mg/L	93	70	130			
WG494534ICSAB	ICSAB	03/31/20 13:19	MS200203-2	.02003		.0182	mg/L	91	80	120			
WG49493948PBS	PBS	03/31/20 13:32	W0200200 2	.02003		.0102 U	mg/L	91	-0.018	0.018			
WG493540FB3 WG494534CCV1	CCV	03/31/20 13:54	MS200228-5	.50075		.5116	mg/L	102	90	110			
WG494534CCV1 WG494534CCB1	CCB	03/31/20 13:57	WG200220 0	.50075		.3110 U	mg/L	102	-0.018	0.018			
L57215-08SDL	SDL	03/31/20 13:37			U	U	mg/L		-0.010	0.010		10	
L57215-08MS1	MS	03/31/20 14:00	MS200120-3	.050075	U	.0464	mg/L	93	75	125		10	
L57215-08MSD1	MSD	03/31/20 14:09	MS200120-3	.050075	U	.0466	mg/L	93	75 75	125	0	20	
L57215-08DUP	DUP	03/31/20 14:15		.000010	U	U	mg/L	00	10	120	0	20	RA
WG493948LFB2	LFB	03/31/20 14:19	MS200120-3	.050075	Ü	.0465	mg/L	93	80	120	Ü	20	101
WG494534CCV2	CCV	03/31/20 14:22	MS200228-5	.50075		.5074	mg/L	101	90	110			
WG494534CCB2	CCB	03/31/20 14:24		.000.0		U	mg/L		-0.018	0.018			
WG494824													
WG494824ICV	ICV	04/02/20 17:33	MS200331-1	.05		.0517	mg/L	103	90	110			
WG494824ICB	ICB	04/02/20 17:35		.00		U	mg/L		-0.018	0.018			
WG494824PQV	PQV	04/02/20 17:37	MS200327-4	.0150225		.0152	mg/L	101	70	130			
WG494824ICSAB	ICSAB	04/02/20 17:40	MS200203-2	.02003		.0205	mg/L	102	80	120			
WG494001PBS	PBS	04/02/20 17:44		.02000		.0200 U	mg/L	102	-0.018	0.018			
WG494001LFB2	LFB	04/02/20 17:44	MS200120-3	.050075		.0522	mg/L	104	80	120			
L57215-17MS1	MS	04/02/20 17:50	MS200120-3	.050075	U	.0513	mg/L	102	75	125			
L57215-17MSD1	MSD	04/02/20 17:52	MS200120-3	.050075	U	.0521	mg/L	104	75 75	125	2	20	
WG494824CCV1	CCV	04/02/20 17:57	MS200228-5	.50075	O	.5007	mg/L	100	90	110	2	20	
WG494824CCB1	CCB	04/02/20 17:59	0200220 0	.50075		.3007 U	mg/L	100	-0.018	0.018			
L57217-02SDL	SDL	04/02/20 17:03			U	U	mg/L		-0.010	0.010		10	
WG494824CCV2	CCV	04/02/20 18:12	MS200228-5	.50075	Ü	.4986	mg/L	100	90	110		10	
WG494824CCB2	CCB	04/02/20 18:13		.00010		.4900 U	mg/L	100	-0.018	0.018			
WG494001PBS	PBS	04/02/20 18:15				U	mg/L		-0.018	0.018			
WG494001FB3 WG494001LFB2	LFB	04/02/20 18:17	MS200120-3	.050075		.0521	mg/L	104	80	120			
WG494824CCV3	CCV	04/02/20 18:17	MS200120-3 MS200228-5	.50075		.5004	mg/L	104	90	110			
WG494824CCV3	CCB	04/02/20 18:22	WIOZO0ZZ0-0	.50075		.5004 U	mg/L	100	-0.018	0.018			
** O+3+02400D3	COD	07/02/20 10.22				<u> </u>	9/.		-0.010	0.010			

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-01	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-02	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-03	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation SM4500-CN I,E-Colorimetric w/	Q6	Sample was received above recommended temperature.  Relative Percent Difference (RPD) was not used for data
			distillation	IVA	validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-04	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA		Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

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ACZ Project	ID:	L57215

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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### Wood - E&I Solutions, Inc.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

407 ID	WORKNIIM	DADAMETED	METHOD	OLIAL	PEROPERTION
ACZ ID		PARAMETER	METHOD		DESCRIPTION
L57215-05	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration		Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
		M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
		M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
		M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
		M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
		M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
		M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
		M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
		M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-06	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA		Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA		Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-07	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNIIM	DADAMETED	METHOD	QUAL	DESCRIPTION
ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

A07 ID	MODKALLIM	DADAMETED	METHOD	OLIAL	PECCEIPTION
ACZ ID		PARAMETER	METHOD MC040D IOD		DESCRIPTION
L57215-08	WG494597	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Calcium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494501	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494476	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494534	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494511	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Hydroxide as CaCO3	SM2320B - Titration		Sample was received above recommended temperature.
	WG494597	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494534	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494439	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494534	Molybdenum (MWMT)	M6020B ICP-MS		For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494452	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494529	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494716	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494534	Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494485	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

		_			
ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494534	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494597	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494501	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494534	Uranium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-09	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS		For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation SM4500-CN I,E-Colorimetric w/	H1 Q6	Sample prep or analysis performed past holding time. See case narrative.  Sample was received above recommended temperature.
			distillation SM4500-CN I.E-Colorimetric w/	RA	Relative Percent Difference (RPD) was not used for data
			distillation		validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-10	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA		Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-11	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
,	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
١	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
١	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
\	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
\	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-12	WG494738	Aluminum (MWMT)	M6010D ICP		Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-13	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNU <u>M</u>	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-14	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-15	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-16	WG494738	Aluminum (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Antimony (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Arsenic (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
	WG494738	Barium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Beryllium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494662	Cadmium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494616	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Chromium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Cobalt (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494561	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494738	Iron (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Lead (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Lithium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Magnesium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Manganese (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494613	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494662	Nickel (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494707	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495090	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Phosphorus (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Potassium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494570	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540C	Z3	Sample volume yielded a residue less than 2.5 mg
	WG494662	Selenium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Sodium (MWMT)	M6010D ICP	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
		Strontium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494662	Thallium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thorium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494738	Tin (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Titanium (MWMT)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494561	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG494662	Uranium (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Vanadium (MWMT)	M6020B ICP-MS	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
			M6020B ICP-MS	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Zinc (MWMT)	M6020B ICP-MS	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	ОПА	DESCRIPTION
L57215-17	WG494741	Bicarbonate as CaCO3	SM2320B - Titration	Q0AL Q6	Sample was received above recommended temperature.
20/210-1/	WG494800	Boron (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494741	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494853	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494741	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494800	Magnesium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494701	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
	WG494708	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
	M353.2 - Automated C Reduction		M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495092	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494800	Potassium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494730	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	Z3	Sample volume yielded a residue less than 2.5 mg
	WG494824	Selenium (MWMT)	M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494726	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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ACZ Project ID: L57215

### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			D516-07 - Turbidimetric	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494741	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	ОПА	DESCRIPTION
L57215-18	WG494741	Bicarbonate as CaCO3	SM2320B - Titration	Q0AL Q6	Sample was received above recommended temperature.
207210-10	WG494800	Boron (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494741	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494853	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494741	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494800	Magnesium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494701	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
	WG494708	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495092	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494800	Potassium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494730	Residue, Filterable (TDS) @180C (MWMT)	SM2540C	Z3	Sample volume yielded a residue less than 2.5 mg
	WG494824	Selenium (MWMT)	M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.

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ACZ Project ID: L57215

Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG494741	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration		Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ ID	WORKNILM	PARAMETER	METHOD	OHAL	DESCRIPTION
ACZ ID	WG494741	PARAMETER  Bicarbonate as CaCO3	METHOD SM2320B - Titration		DESCRIPTION Sample was received above recommended temperature
L57215-19	WG494741 WG494800	Boron (MWMT)	M6010D ICP		Sample was received above recommended temperature.  The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494741	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494853	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
	distillation validation because the	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).			
	WG494741	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494800	Magnesium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494701	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
	WG494708	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction		Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495092	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494800	Potassium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494824	Selenium (MWMT)	M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494741	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data

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Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

ACZID WORKNUM PARAMETER METHOD QUAL DESCRIPTION

validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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### Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-20	WG494741	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494800	Boron (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494741	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494853	Chloride (MWMT)	SM4500CI-E	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494945	Cyanide, WAD (MWMT)	SM4500-CN I,E-Colorimetric w/ distillation	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494741	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG494800	Magnesium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494701	Mercury (MWMT)	M7470A CVAA	H1	Sample prep or analysis performed past holding time. See case narrative.
			M7470A CVAA	Q6	Sample was received above recommended temperature.
	WG494708	Nitrate/Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nitrite as N (MWMT)	M353.2 - Automated Cadmium Reduction	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495092	Nitrogen, total Kjeldahl (MWMT)	M351.2 - Block Digestor	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
			M351.2 - Block Digestor	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - Block Digestor	Q6	Sample was received above recommended temperature.
			M351.2 - Block Digestor	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG494800	Potassium (MWMT)	M6010D ICP	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494824	Selenium (MWMT)	M6020B ICP-MS	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG494723	Sulfate (MWMT)	D516-07 - Turbidimetric	HD	Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis.
	WG494741	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data

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Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

ACZID WORKNUM PARAMETER METHOD QUAL DESCRIPTION

validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB206\_145-155

Locator:

ACZ Sample ID: **L57215-01** 

Date Sampled: 01/22/20 10:28

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:02		0.63	0.35	0.64	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		-1	2.5	6.9	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID: Sample ID:

WRSB206\_175-182

Locator:

ACZ Sample ID: L57215-02

Date Sampled: 01/23/20 14:00

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:04		0.65	0.47	0.87	pCi/L	*	djc

Radium 228 (MWMT) Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		-1.1	2.7	6.7	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB206\_187-192

Locator:

ACZ Sample ID: L57215-03

Date Sampled: 01/23/20 14:40

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:05		0.53	0.4	0.34	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		0.29	2.7	6.9	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB206\_197-202

Locator:

ACZ Sample ID: **L57215-04** 

Date Sampled: 01/27/20 15:02

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:07		1.8	0.61	1.1	pCi/L	*	djc

Radium 228 (MWMT) Prep Method:

Parameter	Measure Date	Prep Date	Result E	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		0.37	3	7.1	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_0.5-3

Locator:

ACZ Sample ID: *L57215-05* 

Date Sampled: 01/22/20 9:18

Date Received: 02/03/20 Sample Matrix: Soil

Radium 226 (MWMT) Prep Method:

M903.1

Parameter Measure Date Prep Date Result Error(+/-) LLD Units XQ Analyst Radium 226 (MWMT) 04/07/20 0:08 0.62 0.49 0.75 pCi/L \* djc

Radium 228 (MWMT) Prep Method:

П	Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Ī	Radium 228 (MWMT)	03/31/20 13:13		2.8	3	7	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_6-15

Locator:

Date Sampled: 01/22/20 9:38

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:10		0.83	0.53	0.39	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		0.14	2.7	6.7	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_25-35

Locator:

ACZ Sample ID: **L57215-07** 

Date Sampled: 01/22/20 10:02

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:11		0.5	0.45	0.51	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		-1.1	2.8	6.7	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_65-75

Locator:

Date Sampled: 01/22/20 11:03

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:12		0.96	0.44	0.48	pCi/L	*	djc

Radium 228 (MWMT) Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	03/31/20 13:13		2.9	2.5	6.2	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_105-115

Locator:

ACZ Sample ID: L57215-09

Date Sampled: 01/22/20 13:37

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

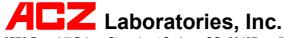
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:02		-0.44	0.38	0.36	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		0.83	2.1	6.1	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_125-135

Locator:

ACZ Sample ID: **L57215-10** 

Date Sampled: 01/22/20 14:58

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:04		0.67	0.32	0.41	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		-0.27	2.6	6.5	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_140-145

Locator:

Date Sampled: 01/23/20 9:37

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

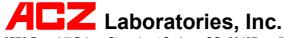
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:05		0.6	0.42	0.5	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		-1	2.3	5.4	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB207\_150-155

Locator:

ACZ Sample ID: **L57215-12** 

Date Sampled: 01/23/20 9:40

Date Received: 02/03/20 Sample Matrix: Soil

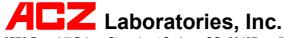
Radium 226 (MWMT) Prep Method:

M903.1

Parameter Measure Date Prep Date Result Error(+/-) LLD Units XQ Analyst Radium 226 (MWMT) 04/07/20 0:07 0.71 0.39 0.41 pCi/L \* djc

Radium 228 (MWMT) Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		-1.4	2.3	5.6	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB234\_0.5-3

Locator:

ACZ Sample ID: **L57215-13** 

Date Sampled: 01/23/20 11:38

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:08		0.4	0.41	0.74	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		1.9	2.2	5.4	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB234\_6-15

Locator:

Date Sampled: 01/23/20 12:00

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:10		0.68	0.29	0.25	pCi/L	*	dic

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		-0.65	2.4	5.7	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB223\_0.5-3

Locator:

ACZ Sample ID: L57215-15

Date Sampled: 01/23/20 13:35

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:11		0.2	0.45	0.86	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter		Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	(MWMT)	04/03/20 14:25		0.53	2.4	5.7	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB223\_6-15

Locator:

ACZ Sample ID: **L57215-16** 

Date Sampled: 01/23/20 13:46

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/07/20 0:12		0.49	0.39	0.66	pCi/L	*	djc

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/03/20 14:25		-0.94	2.5	5.6	pCi/L	*	amk



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB228\_0.5-3

Locator:

ACZ Sample ID: *L57215-17* 

Date Sampled: 01/23/20 14:28

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

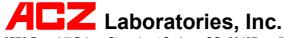
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/09/20 0:02		7.3	0.74	0.33	pCi/L	*	jlg

Radium 228 (MWMT)

Prep Method:

П	Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Ī	Radium 228 (MWMT)	04/05/20 14:47		1.5	2.7	6.7	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID: Sample ID:

WRSB228-FD\_0.5-3

Locator:

ACZ Sample ID: **L57215-18** 

Date Sampled: 01/23/20 14:30

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/09/20 0:04		0.21	0.4	0.38	pCi/L	*	jlg

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result I	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/05/20 14:47		-0.71	2.7	6.8	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB228\_6-15

Locator:

ACZ Sample ID: L57215-19

Date Sampled: 01/23/20 14:44

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/09/20 0:05		0.93	0.39	0.45	pCi/L	*	jlg

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/05/20 14:48		-0.13	2.6	6.1	pCi/L	*	isn



Wood - E&I Solutions, Inc.

Project ID:

Sample ID: WRSB227\_0.5-3

Locator:

ACZ Sample ID: **L57215-20** 

Date Sampled: 01/24/20 8:40

Date Received: 02/03/20

Sample Matrix: Soil

Radium 226 (MWMT)

M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (MWMT)	04/09/20 0:07		0.94	0.31	0.41	pCi/L	*	jlg

Radium 228 (MWMT)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228 (MWMT)	04/05/20 14:48		2	2.6	6.1	pCi/L	*	isn

## Report Header Explanations

Batch A distinct set of samples analyzed at a specific time

Error(+/-) Calculated sample specific uncertainty

Found Value of the QC Type of interest

Limit Upper limit for RPD, in %.

LCL Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD Calculated sample specific Lower Limit of Detection

PCN/SCN A number assigned to reagents/standards to trace to the manufacturers certificate of analysis

PQL Practical Quantitation Limit

QC True Value of the Control Sample or the amount added to the Spike

Rec Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)

RER Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.

RPD Relative Percent Difference, calculation used for Duplicate QC Types

UCL Upper Control Limit, in % (except for LCSS, mg/Kg)

Sample Value of the Sample of interest

## **QC Sample Types**

 DUP
 Sample Duplicate
 MS/MSD
 Matrix Spike/Matrix Spike Duplicate

 LCSS
 Laboratory Control Sample - Soil
 PBS
 Prep Blank - Soil

LCSW Laboratory Control Sample - Water PBW Prep Blank - Water

## QC Sample Type Explanations

Blanks Verifies that there is no or minimal contamination in the prep method procedure.

Control Samples Verifies the accuracy of the method, including the prep procedure.

Duplicates Verifies the precision of the instrument and/or method.

Matrix Spikes Determines sample matrix interferences, if any.

## ACZ Qualifiers (Qual)

H Analysis exceeded method hold time.

## **Method Prefix Reference**

M EPA methodology, including those under SDWA, CWA, and RCRA
 SM Standard Methods for the Examination of Water and Wastewater.

D ASTM
RP DOE
ESM DOE/ESM

## Comments

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ Extended Qualifiers, please click:

https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

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Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 226 (MWMT) M903.1 Units: pCi/L

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG494588																
WG493948PBW	PBW	04/07/20						.12	0.32	8.0			1.6			
WG493948LCSW	LCSW	04/07/20	PCN57864	66.67				65	2	0.43	98	43	148			
L57215-07DUP	DUP-RPD	04/07/20			0.5	0.45	0.51	.52	0.35	0.57				4	20	
L57215-08MS	MS	04/07/20	PCN57864	66.67	0.96	0.44	0.48	54	2	0.49	80	43	148			
WG494591																
WG493997PBW	PBW	04/07/20						.78	0.33	0.64			1.28			
WG493997LCSW	LCSW	04/07/20	PCN57864	66.67				56	2	0.67	84	43	148			
L57215-13DUP	DUP-RER	04/07/20			0.4	0.41	0.74	.77	0.33	0.33				0.7	2	
L57215-13DUP	DUP-RPD	04/07/20			0.4	0.41	0.74	.77	0.33	0.33				63	20	RG
L57215-14MS	MS	04/07/20	PCN57864	66.67	0.68	0.29	0.25	54	1.7	0.49	80	43	148			
WG494832																
WG494001PBW	PBW	04/09/20						.18	0.31	0.48			0.96			
WG494001LCSW	LCSW	04/09/20	PCN57864	66.67				72	2.7	0.66	108	43	148			
L57215-20DUP	DUP-RPD	04/09/20			0.94	0.31	0.41	.57	0.54	0.66				49	20	RG
L57215-20DUP	DUP-RER	04/09/20			0.94	0.31	0.41	.57	0.54	0.66				0.59	2	
L57217-01MS	MS	04/09/20	PCN57864	66.67	0.63	0.32	0.11	63	2	0.37	94	43	148			

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Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 228 (MWMT) M9320 Units: pCi/L

ACZ ID	Туре	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG494530																
WG493948PBW	PBW	03/31/20						1.2	2.6	6.6			13.2			
L57215-07MS	MS	03/31/20	PCN58076	28.76	-1.1	2.8	6.7	32	3.8	6	115	47	123			
WG493948LCSW	LCSW	03/31/20	PCN58076	28.76				31	3.8	6.4	108	47	123			
L57215-08DUP	DUP-RPD	03/31/20			2.9	2.5	6.2	1.1	2.5	5.7				90	20	RG
L57215-08DUP	DUP-RER	03/31/20			2.9	2.5	6.2	1.1	2.5	5.7				0.51	2	
WG494660																
L57215-13DUP	DUP-RER	04/03/20			1.9	2.2	5.4	.07	2.5	6.5				0.55	2	
L57215-14MS	MS	04/03/20	PCN58076	28.73	-0.65	2.4	5.7	29	3.3	5.4	103	47	123			
WG493997LCSW	LCSW	04/03/20	PCN58076	28.73				27	3.3	5.5	94	47	123			
WG493997PBW	PBW	04/03/20						13	2.4	5.8			11.6			
L57215-13DUP	DUP-RPD	04/03/20			1.9	2.2	5.4	.07	2.5	6.5				186	20	RG
WG494718																
WG494001LCSS	LCSS	04/05/20	PCN58076	28.71				30	3.7	6.2	105	47	123			
WG494001PBS	PBS	04/05/20						3.7	2.8	6.7			13.4			
L57217-01MS	MS	04/05/20	PCN58076	28.71	0.33	2.7	6.4	38	3.8	6	131	47	123			M1
L57215-20DUP	DUP-RER	04/05/20			2	2.6	6.1	.19	2.5	6.2				0.5	2	
L57215-20DUP	DUP-RPD	04/05/20			2	2.6	6.1	.19	2.5	6.2				165	20	RG

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ACZ Project ID: L57215

## Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-01	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-02	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-03	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-04	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-05	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-06	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-07	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-08	WG494530	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-09	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-10	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-11	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-12	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-13	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

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ACZ Project ID: L57215

## Wood - E&I Solutions, Inc.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57215-14	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-15	WG494591	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-16	WG494591	Radium 226 (MWMT)	M903.1		Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494660	Radium 228 (MWMT)	M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-17	WG494832	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494718	Radium 228 (MWMT)	M9320	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-18	WG494832	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494718	Radium 228 (MWMT)	M9320	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-19	WG494832	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494718	Radium 228 (MWMT)	M9320	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L57215-20	WG494832	Radium 226 (MWMT)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG494718	Radium 228 (MWMT)	M9320	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M9320	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

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## Certification Qualifiers

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

## Metals Analysis

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

 Molybdenum (MWMT)
 M6020B ICP-MS

 Selenium (MWMT)
 M6020B ICP-MS

 Thorium (MWMT)
 M6020B ICP-MS

 Titanium (MWMT)
 M6010D ICP

 Uranium (MWMT)
 M6020B ICP-MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Thorium (MWMT) M6020B ICP-MS

## Radiochemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Radium 226 (MWMT) M903.1 Radium 228 (MWMT) M9320

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Radium 226 (MWMT) M903.1 Radium 228 (MWMT) M9320

## Soil Preparation

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Dry Weight ASTM E2242-13 Extraction pH ASTM E2242-13 **Extraction Temperature** ASTM E2242-13 **Extraction Time** ASTM E2242-13 Leachate Volume ASTM E2242-13 Particle Size over 5 cm ASTM E2242-13 Post Filter pH ASTM E2242-13 Pre Filter pH ASTM E2242-13 Retained Moisture ASTM E2242-13 Temperature ASTM E2242-13 Time In ASTM E2242-13 Time Out ASTM E2242-13

## Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Bicarbonate as CaCO3 SM2320B - Titration
Carbonate as CaCO3 SM2320B - Titration
Chloride (MWMT) SM4500Cl-E

Cyanide, WAD (MWMT) SM4500-CN I,E-Colorimetric w/ distillation

Fluoride (MWMT) SM4500F-C Hydroxide as CaCO3 SM2320B - Titration

Nitrate/Nitrite as N (MWMT) M353.2 - Automated Cadmium Reduction
Nitrite as N (MWMT) M353.2 - Automated Cadmium Reduction

Nitrogen, total Kjeldahl (MWMT) M351.2 - Block Digestor

Residue, Filterable (TDS) @180C SM2540C

(MWMT)

Sulfate (MWMT) D516-07 - Turbidimetric
Total Alkalinity SM2320B - Titration

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

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## Certification Qualifiers

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

Bicarbonate as CaCO3 SM2320B - Titration
Carbonate as CaCO3 SM2320B - Titration
Chloride (MWMT) SM4500Cl-E
Fluoride (MWMT) SM4500F-C
Hydroxide as CaCO3 SM2320B - Titration

Nitrate/Nitrite as N (MWMT) M353.2 - Automated Cadmium Reduction
Nitrite as N (MWMT) M353.2 - Automated Cadmium Reduction

Nitrogen, total Kjeldahl (MWMT) M351.2 - Block Digestor

Residue, Filterable (TDS) @180C SM2540C

(MWMT)

Sulfate (MWMT) D516-07 - Turbidimetric
Total Alkalinity SM2320B - Titration

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## Sample Receipt

Wood - E&I Solutions, Inc.

ACZ Project ID: L57215

Date Received: 02/03/2020 17:07

Received By:

Date Printed: 2/4/2020

Receipt Verification			
	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	Х		
3) Does this project require special handling procedures such as CLP protocol?		Х	
4) Are any samples NRC licensable material?			Χ
5) If samples are received past hold time, proceed with requested short hold time analyses?	Х		
6) Is the Chain of Custody form complete and accurate?	Х		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	Х		
A change was made in the Sample ID, date, line 4 section prior to ACZ custody.			

Samples/Containers			
	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	Χ		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? 1			Х
12) Is there sufficient sample volume to perform all requested work?	Χ		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		
	NA indica	tes Not Ap	oplicable

## **Chain of Custody Related Remarks**

## **Client Contact Remarks**

## Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(μR/Hr)	Custody Seal Intact?
NA32298	16.2	NA	20	Yes
NA32283	19.7	NA	15	Yes
NA32288	20.3	NA	20	Yes
NA32290	20.4	NA	22	Yes
NA32295	19.7	NA	19	Yes
NA32284	20.2	NA	21	Yes
NA32299	8.3	NA	20	Yes
NA32285	20.4	NA	22	Yes

**REPAD LPII 2012-03** 

L57215-2007241055 Page 194 of 251



Sample Receipt

Wood - E&I Solutions, Inc. ACZ Project ID: L57215

Date Received: 02/03/2020 17:07

Received By:

Date Printed: 2/4/2020

NA32289	20.4	NA	23	Yes
NA32294	19.7	NA	20	Yes
NA32291	20.1	NA	20	Yes
NA32297	18.7	NA	22	Yes

Was ice present in the shipment container(s)?

No - Wet or gel ice was not present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

L57215-2007241055 Page 195 of 251

The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

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\_\_\_\_\_\_ munusement Program LaMP Chain of Custody Record

Anaconda Copper Mine Site NV\_YERINGTON BP/ARC Site Node Path: **BP/ARC Facility Name:** 

Atlantic Richfield Company

Reg Due Date (mm/dd/yy): Lab Work Order Number:

욷 Rush TAT: Yes

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Page

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• Time 0.2 'Metals are: Al, Ba, B, Ca, Fe, K, Li, Mg, Na, P, Sr, Sn, Ti, by SW6010B; Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description. Total Alk, Bicarb Alk (as CaCO<sub>3</sub>) Zn by SW6020; Hg by SW7470A. 10940 White Rock Rd, Ste 190, Rancho Cordova, CA 95670 extract following MWMP (E2242) Mo, Ni, Sb, Se, Ag, Th, Tl, U, V, As, Be, Cd, Cr, Co, Cu, Pb, Mn, Kent.Parrish@woodplc.com Report Type & QC Level Analyses to be performed on SA18170340.005.055B 2-3-1020 Date Comments Email Report/EDD To: lynda.lombardi@woodplc.com Full Data Package Wood - E&I Solutions, Inc Contractor . Consultant/Contractor PM: Kent Parrish Accepted By / Affiliation 916-636-3200 Email: D/WS/WSD Consultant/Contractor Project No: Consultant/Contractor: mo Requested Analyses Invoice To: Phone: Address: 1WMP Ra-226/ Ra-228 WWMP TDS, pH, Alkalinity Time 1600 WMMP TKN as N; WAD CN NDEP Abandoned Mine Lands Program 1/28/20 VO3+NO2 as N OOC-RM X Date MWMP Anions - Cl, F, SO4, × NWMP Metals Work Release No. No. Containers / Preservative ムめく OOC-BU Yerington, Nevada Relinquished By / Affiliation 1 Austin Circle HCI Provision <sup>⊅</sup>OS<sup>Z</sup>H Unpreserved BP/ARC Facility Address: ead Regulatory Agency. California Global ID No.: Total Number of Containers City, State, ZIP Code: Enfos Proposal No: Accounting Mode: Matrix 10qsV \ 7iA Water / Liquid Stage: × × bilo2 \ lio2 Ship Date: 1 28 20 1400 1440 1502 Time 1028 Address: 2773 Downhill Dr, Steamboat Springs, CO, 80487 Johnson 02/52/1 02/**53**/1 85 1(27/10 02/22/1 02/22/] Date attached Sue Webber (suew@acz.com) WASB206\_197-202 261-481 WRSB206\_175-182  $\lambda o c \lambda$ WRSB206\_145-155 -ab Shipping Accnt: 2897-1804-4 (RC #) Chuck.Stilwell@bp.com ACZ Laboratories, Inc. Sample Description Byce OU-4b\_OU-5\_Soil 713-998-2443 BP/ARC EBM: Chuck Stilwell 970-879-6590 WR58206\_ O A BP affiliated compan Shipment Tracking No: ampler's Company: hipment Method: ampler's Name: ab Bottle Order No. EBM Phone: Name: EBM Email: ab Phone: Other Info: 5 5 5 5 Lab No. L57215-20

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MS/MSD Sample Submitted: Yes / No

Trip Blank: Yes / No

°F/C

Cooler Temp on Receipt:

Temp Blank: Yes / No

Use NV approved protocols for MWMP extractions.

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No

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# Laboratory Management Program LaMP Chain of Custody Record

Anaconda Copper Mine Site BP/ARC Site Node Path: NV YERINGTON

Req Due Date (mm/dd/yy): Lab Work Order Number:

Page 2 of 4 × Rush TAT: Yes

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Company Sompany	BP/ARC	BP/ARC Facility Name:	Anacc	nda	Coppe	Anaconda Copper Mine Site	s Site				ab Wor	k Orde	Lab Work Order Number:	ï.	1					
A BP affiliated company  A 7 1 aboratories Inc.			BP/ARC Facility Address	C Facil	ity Add	.ess:	1 Au	1 Austin Circle	rde					Cons	Consultant/Contractor:	tractor:	×	Wood - E&I Solutions, Inc.	nc.	
1	samboat Spring	CO 80487	zi.	ate Z	City State ZIP Code:		Yerir	ngton, I	Yerington, Nevada					Cons	ultant/Co	Consultant/Contractor Project No:	oject No:	SA18170340.005.055B	005.055B	
Cab Soldiess. 2113 DOWNING DI, Occamboar	Sampoar Opinio		ead R	equilat	ead Begulatory Agency	, Sec	N	P Abai	ndoned	Mine L	NDEP Abandoned Mine Lands Program	ogram		Address:		3940 Whit	B Rock F	10940 White Rock Rd, Ste 190, Rancho Cordova, CA 95670	rdova, CA 95	370
	(doc.com)		Californ	eic Gel	California Global ID No.:	9								Cons	ultant/Co	Consultant/Contractor PM:		Kent Parrish		
าเ			2000	1	oly in			>	Work Release No.	N esec				퓹	Phone: 9	916-636-3200	00 Email:	iail: Kent.Parrish@woodplc.com	gwoodplc.co	ε
Lab Shipping Accnt: 2897-1804-4 (RC #)	(C #)		Ellos Floposal No.		ğ			Ì						4					800	
Lab Bottle Order No:			Accounting Mode:	oting N	lode:	۱ ۵	Provision		90C-BU		OOC-RM	₩   		Ema	Email Report/EUU 10:		lynda.ik	Jilibarui@woodpic.	100	
Other Info: OU-4b_OU-5_Soil			Stage:				Activity:							Invoi	Invoice To:	BP/	BP/ARC	Contractor	$\rtimes$	
BP/ARC EBM: Chuck Stilwell				Matrix		Š.	ontain	ers / P	Containers / Preservative	tive			Redu	sted /	Requested Analyses	_		Report Type &	e & QC Level	<u>-</u>
EBM Phone: 713-998-2443						<u> </u>					PC		-					Standard	lard /	
EBM Email: Chuck. Stilwell@bp.com	mo					iners					<i>i</i> S ±							Full Data Package	age —	
Lab Sample Description No.	Date	Time	bilo2 \ lio2	Water / Liquid Air / Vapor		Total Number of Contain	H <sup>S</sup> 2O <sup>†</sup> Oubleselved	°ОNН	HCI		MWMP Metals <sup>1</sup>	NO3+NO2 as N	MWMP TKN 85 N; W 	MWMP Ra-226/ Ra-			LD/MS/MSD	Note: if sample i Sample* in com and initial any pn	Comments not collected, indicate ments and single-strik eprinted sample desc	"No e out ription.
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Atlantic Skichfield Company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV YERINGTON

BP/ARC Facility Name: Anaconda Copper Mine Site

Req Due Date (mm/dd/yy):
Lab Work Order Number:

Page 3 of 1

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ران ـُ	H <sub>B</sub>	<b>A</b>							,		olori C						Consul	Consultant/Contractor	tractor:	Š	Wood - E&I Solutions, Inc	Inc.	
Lab	Lab Name: AC	ACZ Laboratories, Inc.			BP/ARC Facility Address:	C Faci	lity Adc	ress:	-	1 Austin Circle							nelloo	Idelica	il actor.		3	1	
Lab To	Lab Address: 27	2773 Downhill Dr, Steamboat Springs, CO, 80487	at Springs, C(	J, 80487	City, State, ZIP Code:	ate, Z	P Cod	iii	Αe	ingto	Yerington, Nevada	ada					Consu	tant/Con	Consultant/Contractor Project No:	oject No	SA18170340.005.055B	.005.055B	
)5∯ 15∯ 15	1	Sue Webber (suew@acz.com)	(mo		Lead Regulatory Agency:	egular	ory Ag	ency:	2	EP A	vandor	ned Mir	ne Lan	NDEP Abandoned Mine Lands Program	ram		Address		940 Whit	e Rock F	10940 White Rock Rd, Ste 190, Rancho Cordova, CA 95670	ordova, CA 95	670
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ģ		Sample Description	Date		bilo2 \ lio2	Water / Liq 		ImuM IstoT	H <sup>S</sup> 2O <sup>†</sup>	PONH	нсі		I I CHAVANA	M GMWM A GMWM	NO3+NO	T 9MWM	A AMWM			M/SW/Q7	Note: if sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.	ollected, indicate s and single-strit ited sample des	"No te out cription.
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∠g S	Special Instructions:	Use NV	d protocols for N	AWMP extraction	Š														ļ				

Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No

Cooler Temp on Receipt:

Temp Blank: Yes / No

THIS LINE - LAB USE ONLY: Custody Seals in Place: Yes / No

## **ACZ** Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

By Applies To

zme Production Acct:AMECCA Samp:L57215-13 zme Production Acct:AMECCA Samp:L57215-08

2/4/2020

Instruction Run QC

Run QC

773 Downhill L

## Meteoric Water Mobility

Bench Sheet List: I-RFA-CN-FREE QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT SOP Ref: SOPSO036

## WG493948



Create Date: 03/19/2020 15:00 End Date/Time: 03/26/2020 12:00 Start Date/Time: 03/20/2020 8:00 Instrument ID: SOILSPREP Analyst: GKH ACZ Dept: 20

ACZ Laboratories, Inc

Temper ature	Q	21.1	21	20.9		21.2	20.7	20.2	20.1	20.1	20	20.1	20.9	20	20.1	20.1	20.1	20.1	20.5	20.1	20.3	20.7	20.7
Extracti on Time	(hrs)		A A				24.1668666669	55.999999988	55.999999988	55.999999988	55.99999999988	27.5833333331	27.4166666663	28.9999999988	28.1666666663	28.1666666663	28.1669666663	28.1666666663		28.1666666663	28.5	24.1666666669	24.1666666669
Time Out							3/20/2020 9:40:00 AM	3/21/2020 5:30:00 PM	3/21/2020 5:30:00 PM	3/21/2020 5:30:00 PM	3/21/2020 5:30:00 PM	3/20/2020 1:05:00 PM	3/20/2020 12:55:00 PM	3/20/2020 2:30:00 PM	3/20/2020 1:40:00 PM	3/20/2020 1:40:00 PM	3/20/2020 1:40:00 PM	3/20/2020 1:40:00 PM		3/20/2020 1:40:00 PM	3/20/2020 2:00:00 PM	3/20/2020 9:40:00 AM	3/20/2020 9:40:00 AM
Time In				Anna Carrier			3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM		3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM						
Retaine d Moisture	(%)			and the second s								8.87	10.25	13.25	15.73	15.73	15.73	15.73		15.73	11.16		
Leachat Retaine e d Volume Moisture	(mL)		The same and the s				5005.2	4547.2	4888.4	4777.9	3970.6	5012	5004.8	5001.5	5011.7	5011.7	5011.7	5011.7		5011.7	5020.2	5005.2	5005.2
Dry Weight	(a)						0	2000	2000	2000	5000	5000	5000	2000	5000	5000	2000	5000		2000	2000	0	0
Pre Post Dry Filter pH Filter pH Weight	(units)	10.03	7.03	2.04		4.01	6.12	8.67	8.76	8.78	8.46	8.33	8.23	8.3	9.02	9.02	9.02	9.02	3.99	9.05	8.97	6.12	6.12
Pre Filter pH I	(units)	10.03	7.03	2.04		3.96	6.16	8.76	8.89	8.83	8.42	8.17	8.19	8.22	9.04	9.04	9.04	9.04	4.02	9.04	9.01	6.16	6.16
Extracti on Temper ature	(C)						23	23	23	23	23	23	23	23	23	23	23	23		23	23	23	23
Extracti on pH	(nuits)	10.04	7.01	2.04		3.92	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	16.4	4.91	3.98	4.91	4.91	4.91	4.91
Particle Size over 5 cm	(%)							0	0	0	0	0	0	0	0	0	0	0		0	0		
Analysis Date		03/20/20 8:00	03/20/20 8:00	03/20/20 8:00	03/20/20 8:00	03/20/20 8:00	03/20/20 16:45	03/21/20 0:57	03/21/20 9:08	03/21/20 17:30	03/21/20 17:30	03/20/20 13:05	03/20/20 12:55	03/20/20 14:30	03/20/20 13:40	03/20/20 13:40	03/20/20 13:40	03/20/20 13:40	03/24/20 19:02	03/20/20 13:40	03/20/20 14:00	03/25/20 19:37	03/26/20 3:48
Pri																							
SubSX Pri		as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec	as rec
Client ID		NONE	NONE	NONE	PCN58541		NONE	WRSB206_145-155	WRSB206_175-182	WRSB206_187-192	WRSB206_197-202	WRSB207_0.5-3	WRSB207_6-15	WRSB207_25-35	WRSB207_65-75	MS200120-3	MS200120-3	11200302-4	PCN58541	11200302-4	NONE	11200302-4	MS200120-3
ACZ ID		WG493948CSTD1	WG493948CSTD2	WG493948CSTD3	WG493948ICV	WG493948ICV1	WG493948PBS	L57215-01	L57215-02	L57215-03	L57215-04	L57215-05	L57215-06	L57215-07	L57215-08	L57215-08MS1	L57215-08MSD1	L57215-08MS2	WG493948CCV1	L57215-08MSD2	L57215-08DUP	WG493948LFB1	WG493948LFB2
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AREV: (3KH 5/4/20 Initials, Date

SREV: (24 5-4-20

5/4/2020 11:28:49 AM 22620

Page 1 of 2

WGY939481CV not needed

L57215-2007241055

Page 200 of 251

Internal Comments

tron "Time out" column

Report Comments: and chalf orchidely

## Meteoric Water Mobility

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE Method Ref. ASTM E2242-13 Group ID: SP-G-MWMT SOP Ref: SOPSO036

## WG493948



ACZ Laboratories, Inc Create Date: 03/19/2020 15:00 End Date/Time: 03/26/2020 12:00 Start Date/Time: 03/20/2020 8:00 Instrument ID: SOILSPREP Analyst: GKH ACZ Dept: 20

IJ О	ACZ ID	Client ID	SubSX Pri	Pri	Analysis Date	Particle Size over 5 cm	Extracti on pH	Extracti on Temper ature	Pre Filter pH	Post Filter pH	Dry Weight	Leachat e Volume	Retaine d Moisture	Extracti Extracti Pre Post Dry Leachat Retaine Time In Time on pH on Filter pH Filter pH Weight e d Out Temper Volume Moisture ature	Time Out	Extracti Temper on Time ature	Temper ature
						(%)	(units)	<u>O</u>	(units) (units)	(nuits)	(a)	(mL)	(%)			(hrs)	(C)
22	22 WG493948CCV2	PCN58541	as rec		03/26/20 12:00		3.98		4.01	3.97							20.9
Sample		Login Comments			The state of the s									4			
L57215-01		BUCKET    Soils hallway		İ													
157215-02		BUCKET    Soils hallway															
L57215-03		BUCKET    Soils hallway															
L57215-04		BUCKET    Soils hallway															
L57215-05		T    Soils hallway															
L57215-06		T    Soils hallway															
L57215-07		T    Soils hallway															
L57215-08		BUCKET(2)    Soils hallway															
L5721	L57215-08MS1 ICPMS Spike	Spike															
L5721		iķe															
L5721		Spike															
L5721		ike															
WG49	WG493948CCV1 pH QC																
WG49	WG493948CSTD1 pH QC																
WG49	WG493948CSTD2 pH QC																
WG49	WG493948CSTD3 pH QC																
WG49	WG493948ICV pH QC																

Initials, Date Initials, Date AREV: SREV:

5/4/2020 11:28:49 AM 22620

Internal Comments

Report Comments:

WG493948ICV1 ICPMS LFB ICP LFB

WG493948LFB1 WG493948LFB2 WG493948ICV1 WG493948ICV

ACZ Laboratories, Inc. Geochemistry Department Data Review and Reagents

Analyst: GKH

Workgroup: WG493948

Analysis Date: 3/19/20 - 3/26/20

Sample type used: 50)

(Extraction Digestion / Analysis (Prep) / Calc:

Data Reviewer: GKH Date: 4/30/20

Approved: (1+ Date: 1 - 30 - 20)

	Yes	No	N/A
1. Is the raw data checked to the computer printout for transcription errors?			
2. Is the %solid or TS attached for dilution factors?			
3. Were proper volumes of reagents used per final volume?		1	1
4. Was the proper sub-sample used (as received, client prep,<2000, <500, <250, dry, R&P, RPLL)?	1		
5. Were the dilution factor calculation checked (final volume, weight, %solid)?			/
6. Did the RPD pass?		,	1
7. Does all the spike information correlate with each other?	1	1.	
8. Is the appropriate spike in the computer-designated line?	1		
9. Are all errors properly corrected (single-line crossout, dated & initialed)?	1		
10. Is the standard/reagent information complete and current?	1		
11. Is your instrument calibration passing (and included in the data package if needed)?	/		
FOR SREV: QA/QC approval for initial training or 2 sets of initials for WG & LIMS?	1	1	

Standard/Reagent/Equipment*	PCN/SCN/LOT #*	Expiration Date
	1390(17)	
655	VIIIIONS	
560		
-		
And a second of the second of		
orkgroup documentation must include the lot nu	imber(s) of all disposable vessels used f	or volumetric measurements.
omments:		
omments:		

	mistry Department eview and Reagents		ate: 3	7	2	h	
Analyst	•	•	pprove ate:	d: <i>(</i>	S.	∯ Э_	`
Workgr	oup: 14444 WG493948  GKH 3/26/20  s Date: 3/19/20 - 3/26/20			3-	<u>څ</u> ۱	المر	)
Analysi	s Date:						•
Sample	3/19/20 - 3/26/20 type used:						
		Calc:		:			
			r	<del>,,,,,</del>			7/4
1. Is the	raw data checked to the computer prin	tout for transcription errors?		Yes/	Ŋ	0 1	N/A
2. Is the	%solid or TS attached for dilution fac-	tors?		1			1
3. Were	proper volumes of reagents used per fi	inal volume?					V
	he proper sub-sample used (as receive		<u>.                                      </u>				V
R&P, R	PLL)?		,	<b>V</b>			
	the dilution factor calculation checked	(Imai volume, weight, %solid)?					
	ne RPD pass?			İ	ا م		
7. Does	all the spike information correlate with	each other?					
8. Is the	appropriate spike in the computer-des	ignated line?					
9. Are a	ll errors properly corrected (single-line	crossout, dated & initialed)?		1/			
10. Is th	e standard/reagent information comple	ete and current?					
11. Is ye	our instrument calibration passing (and	included in the data package if need	led)?	./			
FOR SI	REV: QA/QC approval for initial train	ing or 2 sets of initials for WG & LII	MS?				
					L		
Star	ndard/Reagent/Equipment*	PCN/SCN/LOT #*	E	xpira		Dat	te
	BUFFER 10 1 7	58541		3/31/			
	$\frac{1}{\sqrt{2}}$	60476		7/31/			
	Y &	58293		12/31/	2 <u>()</u>		
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			<del> </del>				
			<del> </del> -			1	
*Workg	oup documentation must include the lot nu	nmber(s) of all disposable vessels used for	r volun	etric m	easu	emen	ts.
Comm	ents:						
							<del></del>
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## METEORIC WATER MOBILITY TEST

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487 Analyst: **GKH**Date:

Start Time: 3/19/20 8a

End Time: 3/25/20 12p

Workgroup Number: wg493948

## **Feed Moisture**

	L	Wet Sx + Pan	Dry Sx + Pan	% Solid	% Feed
Sx Number	Pan Weight (g)	Weight (g)	Weight (g)	% 50lld	Moisture
L57215-01	141.46	642.42	621.81	95.88589907	4.114100926
L57215-02	151.3	664.61	653.18	97.77327541	2.226724591
L57215-03	160.85	683.93	675.85	98.4553032	1.544696796
L57215-04	150.62	670.92	666.96	99.23890063	0.761099366
L57215-05	137.25	642.59	629.54	97.41758024	2.582419757
L57215-06	146.52	655.34	644.01	97.77327935	2.226720648
L57215-07	151.5	655.16	646.34	98.24881865	1.751181352
L57215-08	145.42	647.9	628.01	96.0416335	3.958366502
L57215-08 DUP	148.86	652.35	632.36	96.02971261	3.970287394

Screening-Particle Size

Sx Number	Sx Weight (g)	Sx > 5 cm (g)	Sx < 5 cm (g)	%Sx > 5cm	%5x < 5cm
L57215-01	5215	0	5215	0	100
L57215-02	5114	Ö	5114	0	100
L57215-03	5079	0	5079	0	100
L57215-04	5039	0	5039	0	100
L57215-05	5133	0	5133	0	100
L57215-06	5114	0	5114	0	100
L57215-07	5090	0	5090	0	100
L57215-08	5207	0	5207	0	100
L57215-08 DUP	5207	0	5207	0	100

## Residual Moisture

Pan Weight (g)	Wet Sx + Pan Weight (g)	Dry Sx + Pan Weight (g)	% Solid	% Res. Moisture			
N/A	N/A	N/A	#VALUE!	#VALUE!			
N/A	N/A	N/A	#VALUE!	#VALUE!			
N/A	N/A	N/A	#VALUE!	#VALUE!			
N/A	N/A	N/A	#VALUE!	#VALUE!			
73.22	369.03	342.8	91.13282174	8.867178256			
73.19	359.91	330.51	89.74609375	10.25390625			
73.97	409.91	365.4	86.75061023	13.24938977			
75.55	371.62	325.05	84.27061168	15.72938832			
H	351.78	320.72	88.84499354	11.15500646			
	N/A N/A N/A N/A 73.22 73.19 73.97 75.55	N/A   N/A	Pan Weight (g)         Weight (g)         Weight (g)           N/A         N/A         N/A           73.22         369.03         342.8           73.19         359.91         330.51           73.97         409.91         365.4           75.55         371.62         325.05	Pan Weight (g)         Weight (g)         Weight (g)         % Solid           N/A         N/A         N/A         #VALUE!           N/A         N/A         N/A         #VALUE!           N/A         N/A         N/A         #VALUE!           N/A         N/A         N/A         #VALUE!           73.22         369.03         342.8         91.13282174           73.19         359.91         330.51         89.74609375           73.97         409.91         365.4         86.75061023           75.55         371.62         325.05         84.27061168			

Time and Temperature for Residual Moisture: 24HR @105C Sample Description: Sand/Fine sand/ Small-Mid sized aggregates

Centrifuge or pre-filter? Centrifuge L57215-01/02/03

Observation of changes:

N/A

Storage Conditions of "as rec" sample: Room

Qualtrax ID: 1220 Revision: 2 Page 204 of 251

ACZID: FRMSO004 L57215-2007241055

## METEORIC WATER MOBILITY TEST

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487

Analyst: GKH

Date: 3/19/20 8a

End Time: 3/25/20 12p

Workgroup Number: Wg493948

## Loaded Sample Wet Weight

Sx Number	\$x Wet Weight (g)
L57215-01	5215
L57215-02	5114
L57215-03	5079
L57215-04	5039
L57215-05	5133
L57215-06	5114
L57215-07	5090
L57215-08	5207
L57215-08 DUP	5207

H2O rate start: 3.5mL/Min H2O rate finish: 3.5mL/Min

Filter Type/pore size: .45um

**Special Comments:** 

**Dry Weight Calculations** 

Sx Number	Sx Weight (g) (From above)	(x)	% Solid	=	Dry Sx Weight (g)	+	Cubetainer Weight (g)		Target Leachate & Cubtainer Wt (g)
L57215-01	5215	х	0.958858991	=	5000.449637	+	140.7	#	5141.14964
L57215-02	5114	х	0.977732754	=	5000.125304	+	138.3	#	5138.4253
L57215-03	5079	×	0.984553032	=	5000.54485	+	137.4	#	5137.94485
L57215-04	5039	х	0.992389006	=	5000.648203	+	138.1	#	5138.7482
L57215-05	5133	х	0.974175802	=	5000.444394	+	137.8	#	5138.24439
L57215-06	5114	х	0.977732794	=	5000.125506	+	139.9	#	5140.02551
L57215-07	5090	х	0.982488186	=	5000.864869	+	137.6	#	5138.46487
L57215-08	5207	Х	0.960416335	=	5000.887856	+	134.2	#	5135.08786
L57215-08 DUP	5207	х	0.960297126	=	5000.267135	+	138.2	#	5138.46714

Final Leachate Weight

Sx Number	Actual Leachate & Cubetainer	_	Cubetainer Wt (g)	=	Final Leachate Volume (mL)
L57215-01	3172.1	-	140.7	=	3031.4
L57215-02	2000.9	-	138.3	=	1862.6
L57215-03	1080.7	-	137.4	=	943.3
L57215-04	464	-	138.1	=	325.9
L57215-05	5149.8	-	137.8	=	5012
L57215-06	5144.7	-	139.9	=	5004.8
L57215-07	5139.1	-	137.6	=	5001.5
L57215-08	5145.9	-	134.2	=	5011.7
L57215-08 DUP	5158.4	-	138.2	=	5020.2

Comments:

17215-01-04: Failed Column Extractions. Sample was extracted for 8 hours via MWMT roll using proper cacula

Calculations can be found on WG benchsheet.

L57215-01: 4547.2 is the total leachate vol. L57215-02: 4888.4 is the total leachate vol.

L57215-03: 4777.9 is the total leachate vol. L57215-04: 3970.6 is the total leachate vol.

Qualtrax ID: 1220 Page 2059 Vision 12

CZID: FRMSO004 L57215-2007241055

## Meteoric Water Mobility

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Bench Sheet List: I-RFA-CN-FREE Group ID: SP-G-MWMT QC List Type: I-X-MWME QCListMatClass: SOLID

## WG493948

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Instrument ID: SOILSPREP **Analyst:** 

ACZ Dept: 20

Create Date: 03/19/2020 15:00 Start Date/Time:

End Date/Time:

Tempe ture	<u>O</u>	21.	٥. ۲. ٥	70.7	21.2	20.7	20.2	20.1	9.1	20.0	20,1	20.9	20.0	10%	-		+	20.5	20.1	20.3	201	*	70,0
Extractio n Time	(hrs)																						
Leachate Retained Time In Time Out Extractio Temper Volume Moisture n Time ture																							
Time In																							
eachate Retained Volume Moisture	%																						
Leachate Volume	(mL)																						
Dry Weight	<b>(</b> 5)														······								
Pre Post Filter pH Filter pH	(units)				10.6	6.12	8.67	8.76 ·	8.78	8:46	8.33	8.23	8 30	20%		_	•	3.99	9.00	8.97	6.12	ъ	3.97
Pre Filter pH	(units)	10.03	7.03	2.04	396	6.16	876	8.89	893	8 42	8.17	8.19	8.22	9.04			<b>&gt;</b>	4.02	90%	9.01	6.16	+	4.0%
Extractio Extraction pH n Temperature	<u>©</u>																						
Extractio n pH	(units)	10.04	7.01	2.04	<i>. 768</i>	491	Į										<b>-</b>	398	15h	-		_ ↓	368
Particle Size over 5	%																						
Analysis Date													-										
Æ										-													
SubSX Pri																							
Client ID	i	NONE	NONE	NONE	PCN58541	NONE	WRSB206_145-155	WRSB206_175-182	WRSB206_187-192	WRSB206_197-202	WRSB207_0.5-3	WRSB207_6-15	WRSB207_25-35	WRSB207_65-75	MS200120-3	MS200120-3	11200302-4	PCN58541	11200302-4	NONE	11200302-4	MS200120-3	PCN58541
ACZ ID		WG493948CSTD1	WG493948CSTD2	WG493948CSTD3	WG493948ICV	WG493948PBS	L57215-01	L57215-02	L57215-03	L57215-04	L57215-05	L57215-06	L57215-07	L57215-08	L57215-08MS1	L57215-08MSD1	L57215-08MS2	WG493948CCV1	L57215-08MSD2	L57215-08DUP	WG493948LFB1	WG493948LFB2	WG493948CCV2
35 O		1	2	3	4	2	9	_	80	6	9	-	12	5	4	15	9	11	13	19	20	21	22

	Date
	Initials,
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Initials, Date SREV:

3/19/2020 3:01:18 PM 22620

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L57215-2007241055

SOP Ref: SOPSO036

Internal Comments

Report Comments:

## Workgroup Review and Approval

WG493948

SREV

WEIGHT, DRY

Date Reported: 30-Apr-20

Run ID: R1779723 Date Analyzed: 20-Mar-20

ICAL Workgroup:

Instrument ID: SOILSPREP

TA

WG4	93948ICV1		Tag:					M	leasure	ed: 3/20/	2020 8:00	:00 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Арри	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.92		
SREV	POST FILTER PH	TEXT		1		units	NEED			4.01		
SREV	PRE FILTER PH	TEXT		1		units	NEED			3.96		
SREV	TEMPERATURE	PREP	20.7	1		С	NEED	0.1	0.1			
L572	15-06		Tag:					M	easure	ed: 3/20/	2020 12:5	5:00 PI
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	√WMT-96	27.41667	1		hrs	++					
SREV	LEACHATE VOLUME	иWMT-96	5004.8	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	иWMT-96	0	1		%	++					
SREV	POST FILTER PH	иWMT-96		1		units	++			8.23		
SREV	PRE FILTER PH	иWMT-96		1		units	++			8.19		
SREV	RETAINED MOISTURE	иWMT-96		1		%	++			10.25		
SREV	TEMPERATURE	иWMT-96	20.9	1		С	++	0.1	0.1			
SREV	TIME IN	иWMT-96		1			++					
SREV	TIME OUT	иWMT-96		1			++					
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++					
L572	15-05		Tag:					M	easure	ed: 3/20/	2020 1:05	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91	TA	
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1		TA	
SREV	EXTRACTION TIME	√WMT-96	27.58333	1		hrs	++				TA	
SREV	LEACHATE VOLUME	√WMT-96	5012	1		mL	++				TA	
SREV	PARTICLE SIZE OVER 5 CM	иWMT-96	0	1		%	++				TA	
SREV	POST FILTER PH	√WMT-96		1		units	++			8.33	TA	
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.17	TA	
SREV	RETAINED MOISTURE	√WMT-96		1		%	++			8.87	TA	
SREV	TEMPERATURE	√WMT-96	20.1	1		С	++	0.1	0.1		TA	
SREV	TIME IN	иWMT-96		1			++				TA	
SREV	TIME OUT	иWMT-96		1			++				TA	

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**л**WМТ-96



L572	15-08		Tag:					M	easure	ed: 3/20/	2020 1:40	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	√WMT-96		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	√WMT-96	28.16667	1		hrs	++					
SREV	LEACHATE VOLUME	√WMT-96	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++					
SREV	POST FILTER PH	√WMT-96		1		units	++			9.02		
SREV	PRE FILTER PH	√WMT-96		1		units	++			9.04		
SREV	RETAINED MOISTURE	√WMT-96		1		%	++			15.73		
SREV	TEMPERATURE	√WMT-96	20.1	1		С	++	0.1	0.1			
SREV	TIME IN	иWMT-96		1			++					
SREV	TIME OUT	√WMT-96		1			++					
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++					
L572′	15-08MS1		Tag:					M	easure	ed: 3/20/	2020 1:40	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP36	666666279	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			9.02		
SREV	PRE FILTER PH	TEXT		1		units	++			9.04		
SREV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
SREV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	5000	1		g	++					
L572′	15-08MS2		Tag:					M	easure	ed: 3/20/	2020 1:40	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
SREV	EXTRACTION PH	TEXT		1		units	++		-	4.91		-
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP36	666666279	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			9.02		
SREV	PRE FILTER PH	TEXT		1		units	++			9.04		
SREV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
SREV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
	TIME IN	DATE		1			++					
SREV												
SREV SREV	TIME OUT	DATE		1			++					

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L5721	15-08MSD1		Tag:					M	easure	ed: 3/20/	2020 1:40	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Арру	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	66666279	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			9.02		
SREV	PRE FILTER PH	TEXT		1		units	++			9.04		
SREV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
SREV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	5000	1		g	++					
L 570	IE OOMEDO		Tag:									
	15-08MSD2								easure		2020 1:40	
Status	Parm_Stored	Туре	Value		Qual		Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	66666279	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			9.02		
SREV	PRE FILTER PH	TEXT		1		units	++			9.04		
SREV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
SREV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	5000	1		g	++					
L572′	15-08DUP		Tag:					M	easure	ed: 3/20/	2020 2:00	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP	28.5	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5020.2	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			8.97		
SREV	PRE FILTER PH	TEXT		1		units	++			9.01		
SREV	RETAINED MOISTURE	TEXT		1		%	++			11.16		
	TEMPERATURE	PREP	20.3	1		С	++	0.1	0.1			
		· · ·				-			J			
SREV	TIME IN	DATE		1			++					
SREV SREV SREV	TIME IN TIME OUT	DATE DATE		1 1			++					

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L572′	15-07		Tag:					M	leasure	ed:	3/20/	2020 2:30	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	/alue	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91		TA	
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1			TA	
SREV	EXTRACTION TIME	√WMT-96	29	1		hrs	++					TA	
SREV	LEACHATE VOLUME	√WMT-96	5001.5	1		mL	++					TA	
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++					TA	
SREV	POST FILTER PH	√WMT-96		1		units	++			8.3		TA	
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.22		TA	
SREV	RETAINED MOISTURE	√WMT-96		1		%	++			13.25		TA	
SREV	TEMPERATURE	√WMT-96	20.0	1		С	++	0.1	0.1			TA	
SREV	TIME IN	√WMT-96		1			++					TA	
SREV	TIME OUT	√WMT-96		1			++					TA	
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++					TA	
WG49	93948PBS		Tag:					M	leasure	ed:	3/20/	2020 4:45	:44 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Арру	MDL	PQL	Text \	/alue	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	PREP36	666666861	1		hrs	++						
SREV	LEACHATE VOLUME	PREP	5005.2	1		mL	++						
SREV	POST FILTER PH	TEXT		1		units	++			6.12			
SREV	PRE FILTER PH	TEXT		1		units	++			6.16			
SREV	TEMPERATURE	PREP	20.7	1		С	++	0.1	0.1				
SREV	TIME IN	DATE		1			++						
SREV	TIME OUT	DATE		1			++						
SREV	WEIGHT, DRY	PREP	0	1		g	++						
L572′	15-01		Tag:					M	leasure	ed:	3/21/	2020 12:5	7:10 A
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	/alue	Ext Qual	Signa
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	4547.2	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			8.67			
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.76			
SREV	TEMPERATURE	√WMT-96	20.2	1		С	++	0.1	0.1				
	TIME IN	√WMT-96		1			++						
SREV													
SREV SREV	TIME OUT	иWMT-96		1			++						

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L5721	15-02		Tag:					M	leasure	ed:	3/21/	2020 9:08	:36 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	√WMT-96		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	4888.4	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			8.76			
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.89			
SREV	TEMPERATURE	√WMT-96	20.1	1		С	++	0.1	0.1				
SREV	TIME IN	√WMT-96		1			++						
SREV	TIME OUT	√WMT-96		1			++						
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++						
L5721	15-03		Tag:					M	leasure	ed:	3/21/	2020 5:30	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91			_
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	4777.9	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			8.78			
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.83			
SREV	TEMPERATURE	√WMT-96	20.1	1		С	++	0.1	0.1				
SREV	TIME IN	√WMT-96		1			++						
SREV	TIME OUT	√WMT-96		1			++						
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++						
L5721	15-04		Tag:					M	leasure	ed:	3/21/	2020 5:30	:00 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	√WMT-96		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	3970.6	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			8.46			
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.42			
SREV	TEMPERATURE	√WMT-96	20.0	1		С	++	0.1	0.1				
SREV	TIME IN	√WMT-96		1			++						
SREV	TIME OUT	иWMT-96		1			++						
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++						
WG49	93948CCV1		Tag:					M	leasure	d:	3/24/	2020 7:02	:56 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.98			
SREV	POST FILTER PH	TEXT		1		units	NEED			3.99			
SREV	PRE FILTER PH	TEXT		1		units	NEED			4.02			
SREV	TEMPERATURE	PREP	20.5	1		С	NEED	0.1	0.1				

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WG49	93948LFB1		Tag:					М	easure	ed: 3/2	5/2020 7:37	:14 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Valu	e Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	66666861	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5005.2	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			6.12		
SREV	PRE FILTER PH	TEXT		1		units	++			6.16		
SREV	TEMPERATURE	PREP	20.7	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
WG49	93948LFB2		Tag:					М	easure	ed: 3/2	6/2020 3:48	:40 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Valu	e Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	66666861	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5005.2	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			6.12		
SREV	PRE FILTER PH	TEXT		1		units	++			6.16		
SREV	TEMPERATURE	PREP	20.7	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
WG49	93948CCV2		Tag:					М	easure	ed: 3/2	6/2020 12:0	0:06 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Valu	e Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.98		
SREV	POST FILTER PH	TEXT		1		units	NEED			3.97		
SREV	PRE FILTER PH	TEXT		1		units	NEED			4.01		
SREV	TEMPERATURE	PREP	20.9	1		С	NEED	0.1	0.1			

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## **Meteoric Water Mobility**

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE

Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT

SOP Ref: SOPSO036

WG493948

Instrument ID: SOILSPREP Analyst: GKH

ACZ Laboratories, Inc

ACZ Dept: 20

Create Date: 03/19/2020 15:00

End Date/Time: 03/26/2020 12:00 Start Date/Time: 03/19/2020 8:00

Temper ature	<u>(</u> )	21.1	21	20.9	21.2	20.7	20.2	20.1	20.1	20	20.1	20.9	20	20.1	20.1	20.1	20.1	20.5	20.1	20.3	20.7	20.7	20.9
Extracti on Time	(hrs)					24.1666666669	25.9999999988	55,9999999988	55.9999999988	55.999999988	27.58333333331	27.41565666663	26.999999988	28.1666666663	28.1666666663	28.166666663	28.166666663		28.1666666663	28.5	24.1666666669	24,166666669	
Time						3/20/2020 9:40:00 AM	3/21/2020 5:30:00 PM	3/21/2020 5:30:00 PM	3/21/2020 5:30:00 PM	3/21/2020 5:30:00 PM	3/20/2020 1:05:00 PM	3/20/2020 12:55:00 PM	3/20/2020 2:30:00 PM	3/20/2020 1:40:00 PM	3/20/2020 1:40:00 PM	3/20/2020 1:40:00 PM	3/20/2020 1:40:00 PM		3/20/2020 1:40:00 PM	3/20/2020 2:00:00 PM	3/20/2020 9:40:00 AM	3/20/2020 9:40:00 AM	
Time In						3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM		3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	3/19/2020 9:30:00 AM	
Retaine d Moisture	(%)										8.87	10.25	13.25	15.73	15.73	15.73	15.73		15.73	11.16			
Leachat Retaine e d Volume Moisture	(mL)					5005.2	4547.2	4888.4	4777.9	3970.6	5012	5004.8	5001.5	5011.7	5011.7	5011.7	5011.7		5011.7	5020.2	5005.2	5005.2	
Dry Weight	(B)					0	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000		2000	2000	0	0	
Pre Post Dry Filter pH Filter pH Weight	(units)	10.03	7.03	2.04	4.01	6.12	8.67	8.76	8.78	8.46	8.33	8.23	8.3	9.02	9.02	9.02	9.02	3.99	9.02	8.97	6.12	6.12	3.97
Pre Filter pH	(nuits)	10.03	7.03	2.04	3.96	6.16	8.76	8.89	8.83	8.42	8.17	8.19	8.22	9.04	9.04	9.04	9.04	4.02	9.04	9.01	6.16	6.16	4.01
Extracti on Temper ature	<u>©</u>					23	23	23	23	23	23	23	23	23	23	23	23		23	23	23	23	
Extracti on pH	(units)	10.04	7.01	2.04	3.92	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	3.98	4.91	4.91	4.91	4.91	3.98
Particle Size over 5 cm	(%)						0	0	0	0	0	0	0	0	0	0	0		0	0	· ·		
Analysis Date		03/19/20 8:00	03/19/20 16:11	03/20/20 0:22	03/20/20 8:34	03/20/20 16:45	03/21/20 0:57	03/21/20 9:08	03/21/20 17:20	03/22/20 1:31	03/22/20 9:42	03/22/20 17:54	03/23/20 2:05	03/23/20 10:17	03/23/20 18:28	03/24/20 2:40	03/24/20 10:51		03/25/20 3:14	03/25/20 11:25	03/25/20 19:37	03/26/20 3:48	03/26/20 12:00
SubSX Pri		U	U	U	O	U	U	O	U	U	v	v	U	U	U	v	Ų	Ų	ړ	ي	ပ္	ပ္	ي
SqnpS		As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec
Client ID		NONE	NONE	NONE	PCN58541	NONE	WRSB206 145-155	WRSB206 175-182	WRSB206 187-192	WRSB206 197-202	WRSB207 0.5-3	WRSB207 6-15	WRSB207 25-35	WRSB207 65-75	MS200120-3	MS200120-3	11200302-4	PCN58541	11200302-4	NONE	11200302-4	MS200120-3	PCN58541
ACZ ID		WG493948CSTD1	WG493948CSTD2	WG493948CSTD3	WG493948ICV	WG493948PBS	1.57215-01	1 57215-02	1 57215-03	1 57215-04	1.57215-05	157215-06	1 57215-07	1 57215-08	157215-08MS1	1 57215-08MSD1	157215-08MS2	WG493948CCV1	1 57215-08MSD2	1 57215-08DI IP	WG493948I FB1	WG493948LFB2	WG493948CCV2
S o		<b>,</b>	7	ო	4	2	· C	^	. 00	σ	, 6	11	12	1 (	5 4	<u>د</u>	2 6	12	ά.	0 0	2 8	27	22

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Initials, Date

3/26/2020 1:59:00 PM 22620

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Internal Comments

Report Comments:

## Meteoric Water Mobility

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Bench Sheet List: I-RFA-CN-FREE Group ID: SP-G-MWMT

SOP Ref: SOPSO036

BUCKET(2) || Soils hallway

ICPMS Spike ICPMS Spike

ICP Spike ICP Spike

pH QC рнαс 를 등 등 등 등 등

WG493948CSTD1 WG493948CSTD2 WG493948CSTD3

WG493948CCV1 L57215-08MSD2

57215-08MSD1

.57215-08MS2 .57215-08MS1

.57215-08

pH QC

ICPMS LFB

ICP LFB

WG493948LFB1 WG493948LFB2

WG493948ICV

BUCKET || Soils hallway BUCKET || Soils hallway

L57215-03

L57215-02 L57215-04 L57215-05 57215-06 \_57215-07

L57215-01

BUCKET || Soils hallway BUCKET | Soils hallway

BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway

Login Comments

## WG493948



## Instrument ID: SOILSPREP

Analyst: GKH

ACZ Laboratories, Inc

ACZ Dept: 20

Create Date: 03/19/2020 15:00

End Date/Time: 03/26/2020 12:00 Start Date/Time: 03/19/2020 8:00

3/26/2020 1:59:00 PM 22620 Initials, Date Initials, Date SREV:

AREV:

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Internal Comments

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Report Comments:

Sample L57215-2007241055

Data Review and Reagents  Approved: Approved: Date:  Workgroup: WG493948  Analysis Date:  3/9/20-3/26/20  Sample type used: 50
$\alpha = \alpha + \beta $
GKH 3/26/20
Sample type used: $3/9/20-3/26/20$
Extraction Digestion / Analysis / (Prep) / Calc:
Yes No N/A
1. Is the raw data checked to the computer printout for transcription errors?
2. Is the %solid or TS attached for dilution factors?
3. Were proper volumes of reagents used per final volume?
4. Was the proper sub-sample used as received client prep, <2000, <500, <250, dry,
R&P, RPLL)?  5. Were the dilution factor calculation checked (final volume, weight, %solid)?
6. Did the RPD pass?
7. Does all the spike information correlate with each other?
8. Is the appropriate spike in the computer-designated line?
9. Are all errors properly corrected (single-line crossout, dated & initialed)?
10. Is the standard/reagent information complete and current?
11. Is your instrument calibration passing (and included in the data package if needed)?
FOR SREV: QA/QC approval for initial training or 2 sets of initials for WG & LIMS?
Standard/Reagent/Equipment* PCN/SCN/LOT #* Expiration Date
BUFFER 10 58541 3/31/21
BUFFER 10 58541 3/31/21 1 7 60476 7/31/21
+ 2 58293 12/3i/20
*Workgroup documentation must include the lot number(s) of all disposable vessels used for volumetric measurements.
Comments:

## **METEORIC WATER MOBILITY TEST**

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487

Analyst:	GKH	
Date:		
Start Time:	3/19/20 8a	
End Time:	3/25/20 12p	

Workgroup Number: wg493948

## **Feed Moisture**

Sx Number	Pan Weight (g)	Wet Sx + Pan	Dry Sx + Pan	% Solid	% Feed
		Weight (g)	Weight (g)		Moisture
L57215-01	141.46	642.42	621.81	95.88589907	4.114100926
L57215-02	151.3	664.61	653.18	97.77327541	2.226724591
L57215-03	160.85	683.93	675.85	98.4553032	1.544696796
L57215-04	150.62	670.92	666.96	99.23890063	0.761099366
L57215-05	137.25	642.59	629.54	97.41758024	2.582419757
L57215-06	146.52	655.34	644.01	97.77327935	2.226720648
L57215-07	151.5	655.16	646.34	98.24881865	1.751181352
L57215-08	145.42	647.9	628.01	96.0416335	3.958366502
L57215-08 DUP	148.86	652.35	632.36	96.02971261	3.970287394

Screening-Particle Size

Sx Number	Sx Weight (g)	Sx > 5 cm (g)	Sx < 5 cm (g)	%Sx > 5cm	%Sx < 5cm		
L57215-01	5215	0	5215	0	100		
L57215-02	5114	0	5114	0	100		
L57215-03	5079	0	5079	0	100		
L57215-04	5039	0	5039	0	100		
L57215-05	5133	0	5133	0	100		
L57215-06	5114	0	5114	0	100		
L57215-07	5090	0	5090	0	100		
L57215-08	5207	0	5207	0	100		
L57215-08 DUP	5207	0	5207	0	100		
LS, LLS 00 DO!							

## Residual Moisture

Sx Number	Pan Weight (g)	Wet Sx + Pan Weight (g)	Dry Sx + Pan Weight (g)	% Solid	% Res. Moisture
L57215-01	N/A	N/A	N/A	#VALUE!	#VALUE!
L57215-02	N/A	N/A	N/A	#VALUE!	#VALUE!
L57215-03	N/A	N/A	N/A	#VALUE!	#VALUE!
L57215-04	N/A	N/A	N/A	#VALUE!	#VALUE!
L57215-05	73.22	369.03	342.8	91.13282174	8.867178256
L57215-06	73.19	359.91	330.51	89.74609375	10.25390625
L57215-07	73.97	409.91	365.4	86.75061023	13.24938977
L57215-08	75.55	371.62	325.05	84.27061168	15.72938832
L57215-08 DUP	73.34	351.78	320.72	88.84499354	11.15500646

Time and Temperature for Residual Moisture: 24HR @105C Sample Description: Sand/Fine sand/ Small-Mid sized aggregates

Centrifuge or pre-filter? Centrifuge L57215-01/02/03

Observation of changes:

N/A

Storage Conditions of "as rec" sample: Room

Qualtrax ID: 1220 Revision: 2

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### METEORIC WATER MOBILITY TEST

ACZ Laboratories, Inc.	
2773 Downhill Dr	
Steamboat Spring	s, CO 80487

Analyst: **GKH**Date:

Start Time: End Time: 3/19/20 8a 3/25/20 12p

Workgroup Number: Wg493948

### Loaded Sample Wet Weight

1
\$x Wet Weight
(g)
5215
5114
5079
5039
5133
5114
5090
5207
5207

H2O rate start: 3.5mL/Min H2O rate finish: 3.5mL/Min

Filter Type/pore size: .45um

**Special Comments:** 

**Dry Weight Calculations** 

Sx Number	Sx Weight (g) (From above)	(x)	% Solid	=	Dry Sx Weight (g)	+	Cubetainer Weight (g)	-	Target Leachate & Cubtainer Wt (g)
L57215-01	5215	Х	0.958858991	=	5000.449637	+	140.7	<b>-</b>	5141.14964
L57215-02	5114	Х	0.977732754	=	5000.125304	+	138.3	#	5138.4253
L57215-03	5079	Х	0.984553032	=	5000.54485	+	137.4	#	5137.94485
L57215-04	5039	Х	0.992389006	=	5000.648203	+	138.1	-	5138.7482
L57215-05	5133	Х	0.974175802	=	5000.444394	+	137.8	#	5138.24439
L57215-06	5114	Х	0.977732794	=	5000.125506	+	139.9	#	5140.02551
L57215-07	5090	Х	0.982488186	=	5000.864869	+	137.6	-	5138.46487
L57215-08	5207	Х	0.960416335	=	5000.887856	+	134.2	#	5135.08786
L57215-08 DUP	5207	х	0.960297126	=	5000.267135	+	138.2	#	5138.46714

Final Leachate Weight

	1				
Sx Number	Actual Leachate & Cubetainer	1	Cubetainer Wt (g)	=	Final Leachate Volume (mL)
L57215-01	3172.1	-	140.7	=	3031.4
L57215-02	2000.9	-	138.3	=	1862.6
L57215-03	1080.7	•	137.4	=	943.3
L57215-04	464	•	138.1	=	325.9
L57215-05	5149.8	1	137.8	=	5012
L57215-06	5144.7		139.9	=	5004.8
L57215-07	5139.1	-	137.6	=	5001.5
L57215-08	5145.9	1	134.2	=	5011.7
L57215-08 DUP	5158.4	_	138.2	=	5020.2

Comments:

47215-01-04: Failed Column Extractions. Sample was extracted for 8 hours via MWMT roll using proper cacula

Calculations can be found on WG benchsheet.

L57215-01: 4547.2 is the total leachate vol. L57215-02: 4888.4 is the total leachate vol.

L57215-03: 4777.9 is the total leachate vol. L57215-04: 3970.6 is the total leachate vol.

Qualtrax ID: 1220 Revision: 2 Page 217 of 251

ACZID: FRMSO004 L57215-2007241055

Bench Sheet List: I-RFA-CN-FREE QC List Type: I-X-MWME QCListMatClass: SOLID

Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT

QC Ref: CSTD3X-PBS-LFB-MSX2

SOP Ref: SOPSO036

# WG493948

ACZ Laboratories, Inc Create Date: 03/19/2020 15:00 Instrument ID: SOILSPREP ACZ Dept: 20 Analyst: Start Date/Time: End Date/Time:

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E G		<u>بر</u>	ネ	R	$\tilde{\gamma}$	35	20	7	Ş	21	20	20	B	Ŕ			+	20,5	202	20.3	13	7	200
Extractic n Time	(hrs)																						
ne Out																							
드																							
Retaine Moistur	(%)																						
Leachate Retained Volume Moisture	(mL)																						
Dry Weight	(B)																						
Post Iter pH	(units)				10.4	6.12	67	8.7%	38	e	8.33	23	8	70		_	-	399	Ø	8.97	<u>.</u>		307
Pre Post Filter pH Filter pH		33	3	74	,	ί.	۲.	,	١.	,		ι.		6 4				1.02			9		3
	(units)	10.03	7.03	2.04	396	į. V	$\infty$	8	8	e0	8.17	8	B	9.0			-	140	904	9.0	3	+	7
Extractio n Tempera ture	<u>©</u>																						
Extractio Extraction n pH n Tempera ture	(units)	10.04	0	40	22	7											-b	398	15				368
		10	14:	ベ	čή	<del>4</del>					4							N	7				a
Particle Size over 5	(%)																						
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Analysis Date						-																	
× Pri																					-		
SubSX		·																					
0					_		5-155	5-182	17-192	7-202	5-3	6-15	5-35	5-75	5	<u>ښ</u>	4	-	4		4	5.3	Ξ
Client ID		NONE	NONE	NONE	PCN58541	NONE	WRSB206_145-155	WRSB206_175-182	WRSB206_187-192	WRSB206_197-202	WRSB207_0.5-3	WRSB207_6-15	WRSB207_25-35	WRSB207_65-75	MS200120-3	MS200120-3	11200302-4	PCN58541	11200302-4	NONE	11200302-4	MS200120-3	PCN58541
<u> </u>					а.		WRSE	WRSE	WRSE	WRSE	WR	WR	WRS	WRS	ž	ž		<u>_</u>				ž	۵
0		STD1	STD2	STD3	300	PBS	25	05	33	8	35	90	07	98	MS1	ASD1	MS2	SCV1	ASD2	20	LFB1	LFB2	CVO
ACZ ID		WG493948CSTD1	WG493948CSTD2	WG493948CSTD3	WG493948ICV	WG493948PBS	L57215-01	L57215-02	L57215-03	L57215-04	L57215-05	L57215-06	L57215-07	L57215-08	L57215-08MS1	L57215-08MSD1	L57215-08MS2	WG493948CCV1	L57215-08MSD2	L57215-08DUP	WG493948LFB1	WG493948LFB2	WG493948CCV2
-		WG48	WG48	WG45	MG	MĞ.	ئد	<u> </u>	ئد	ت	تا	ئد	ĭ	ت	L57.	L572	L57.	WG4	L572	L57.	WG4	WG4	
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Initials, Date

AREV:

Initials, Date

3/19/2020 3:01:18 PM 22620

Internal Comments

Report Comments:

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE

Method Ref: ASTM E2242-13

SOP Ref: SOPSO036

**BUCKET || Soils hallway** BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway **BUCKET || Soils hallway** 

157215-02

L57215-05 L57215-06 L57215-07 L57215-08

Login Comments

Sample L57215-01 L57215-03 L57215-04 BUCKET || Soils hallway BUCKET(2) || Soils hallway

ICPMS Spike ICPMS Spike

ICP Spike ICP Spike ICPMS LFB

ICP LFB

WG493948LFB1

WG493948LFB2 WG493948ICV

9H 9C pH QC

PH QC PH QC

> WG493948CSTD1 WG493948CSTD2 WG493948CSTD3

L57215-08MSD2 WG493948CCV1

L57215-08MSD1

L57215-08MS2 L57215-08MS1

Group ID: SP-G-MWMT

ACZ Laboratories, Inc

Instrument ID: SOIL SPREP

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Create Date: 03/19/2020 15:00

Start Date/Time: End Date/Time:

ACZ Dept: 20 Analyst:

LEXIVIANT 875	173.2	195.1	842.1
RETAINED 1093.6	2964.2	3.1985	3832,2
LEACHATE 3031.4	9.2981	943.3	325.9
57215-01	57215-02	157215-03	157215-04

Initials, Dat	Initials, Dat
AREV:	SREV:

3/19/2020 3:01:18 PM 22620

Internal Comments

Report Comments:

### Workgroup Review and Approval

WG493948

L57215-2007241055

Date Reported: 31-Mar-20

Run ID: R1775685

Date Analyzed: 20-Mar-20

ICAL Workgroup:

Instrument ID: SOILSPREP

WG4	93948ICV		Tag:					M	easure	ed: 3/20/	2020 8:34	:18 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.92		
SREV	POST FILTER PH	TEXT		1		units	NEED			4.01		
SREV	PRE FILTER PH	TEXT		1		units	NEED			3.96		
SREV	TEMPERATURE	PREP	21.2	1		С	NEED	0.1	0.1			
WG4	93948PBS		Tag:					M	easure	ed: 3/20/	2020 4:45	:44 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	666666861	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5005.2	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			6.12		
SREV	PRE FILTER PH	TEXT		1		units	++			6.16		
SREV	TEMPERATURE	PREP	20.7	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
L572	15-01		Tag:					M	easure	ed: 3/21/	2020 12:5	7:10 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	WMT-96	56	1		hrs	++					
SREV	LEACHATE VOLUME	√WMT-96	4547.2	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++					
SREV	POST FILTER PH	√WMT-96		1		units	++			8.67		
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.76		
SREV	TEMPERATURE	√WMT-96	20.2	1		С	++	0.1	0.1			
SREV	TIME IN	√WMT-96		1			++					
SREV	TIME OUT	<b>MWMT-96</b>		1			++					
U. (_ V												

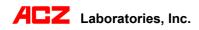
Page 1 of 6

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L572 <sup>2</sup>	15-02		Tag:					M	leasure	ed:	3/21/	2020 9:08	:36 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signa
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	WMT-96	4888.4	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	WMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			8.76			
SREV	PRE FILTER PH	WMT-96		1		units	++			8.89			
SREV	TEMPERATURE	√WMT-96	20.1	1		С	++	0.1	0.1				
SREV	TIME IN	√WMT-96		1			++						
SREV	TIME OUT	√WMT-96		1			++						
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++						
L572	15-03		Tag:					M	leasure	ed:	3/21/	2020 5:20	:02 PN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Арру	MDL	PQL	Text	Value	Ext Qual	Signa
SREV	EXTRACTION PH	MWMT-96		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	4777.9	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++						
SREV	POST FILTER PH	WMT-96		1		units	++			8.78			
SREV	PRE FILTER PH	MWMT-96		1		units	++			8.83			
SREV	TEMPERATURE	WMT-96	20.1	1		С	++	0.1	0.1				
SREV	TIME IN	WMT-96		1			++						
SREV	TIME OUT	WMT-96		1			++						
SREV	WEIGHT, DRY	WMT-96	5000	1		g	++						
L572	15-04		Tag:					M	leasure	ed:	3/22/	2020 1:31	:28 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signa
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91			
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	56	1		hrs	++						
SREV	LEACHATE VOLUME	MWMT-96	3970.6	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			8.46			
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.42			
SREV	TEMPERATURE	√WMT-96	20.0	1		С	++	0.1	0.1				
SREV	TIME IN	√WMT-96		1			++						
OILL				4									
SREV	TIME OUT	иWMT-96		1			++						

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L572′	15-05		Tag:					M	easure	ed: 3/22/	2020 9:42	:54 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			4.91	TA	
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1		TA	
SREV	EXTRACTION TIME	√WMT-96	27.58333	1		hrs	++				TA	
SREV	LEACHATE VOLUME	√WMT-96	5012	1		mL	++				TA	
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++				TA	
SREV	POST FILTER PH	√WMT-96		1		units	++			8.33	TA	
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.17	TA	
SREV	RETAINED MOISTURE	√WMT-96		1		%	++			8.87	TA	
SREV	TEMPERATURE	√WMT-96	20.1	1		С	++	0.1	0.1		TA	
SREV	TIME IN	√WMT-96		1			++				TA	
SREV	TIME OUT	иWMT-96		1			++				TA	
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++				TA	
L572′	15-06		Tag:					M	easure	ed: 3/22/	2020 5:54	:20 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	√WMT-96		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	√WMT-96	27.41667	1		hrs	++					
SREV	LEACHATE VOLUME	√WMT-96	5004.8	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++					
SREV	POST FILTER PH	иWMT-96		1		units	++			8.23		
SREV	PRE FILTER PH	иWMT-96		1		units	++			8.19		
SREV	RETAINED MOISTURE	иWMT-96		1		%	++			10.25		
SREV	TEMPERATURE	иWMT-96	20.9	1		С	++	0.1	0.1			
SREV	TIME IN	иWMT-96		1			++					
SREV	TIME OUT	иWMT-96		1			++					
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++					
L572′	15-07		Tag:					M	easure	ed: 3/23/	2020 2:05	:46 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
SREV	EXTRACTION PH	√WMT-96		1		units	++			4.91	TA	
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1		TA	
SREV	EXTRACTION TIME	√WMT-96	29	1		hrs	++				TA	
SREV	LEACHATE VOLUME	√WMT-96	5001.5	1		mL	++				TA	
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++				TA	
SREV	POST FILTER PH	√WMT-96		1		units	++			8.3	TA	
SREV	PRE FILTER PH	√WMT-96		1		units	++			8.22	TA	
SREV	RETAINED MOISTURE	√WMT-96		1		%	++			13.25	TA	
SREV	TEMPERATURE	√WMT-96	20.0	1		С	++	0.1	0.1		TA	
	TIME IN	√WMT-96		1			++				TA	
SREV											<b>T</b> ^	
SREV SREV	TIME OUT	MWMT-96		1			++				TA	

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L572	15-08		Tag:					M	easure	ed: 3/23/	2020 10:1	7:12 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Арру	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	MWMT-96		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	VWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	MWMT-96	28.16667	1		hrs	++					
SREV	LEACHATE VOLUME	MWMT-96	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	0	1		%	++					
SREV	POST FILTER PH	MWMT-96		1		units	++			9.02		
SREV	PRE FILTER PH	MWMT-96		1		units	++			9.04		
SREV	RETAINED MOISTURE	MWMT-96		1		%	++			15.73		
SREV	TEMPERATURE	MWMT-96	20.1	1		С	++	0.1	0.1			
SREV	TIME IN	MWMT-96		1			++					
SREV	TIME OUT	MWMT-96		1			++					
SREV	WEIGHT, DRY	MWMT-96	5000	1		g	++					
L572′	15-08MS1		Tag:					M	easure	ed: 3/23/	2020 6:28	:38 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP36	666666279	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			9.02		
SREV	PRE FILTER PH	TEXT		1		units	++			9.04		
SREV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
SREV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	5000	1		g	++					
L572′	15-08MSD1		Tag:					M	easure	ed: 3/24/	2020 2:40	:04 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP36	666666279	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			9.02		
SREV	PRE FILTER PH	TEXT		1		units	++			9.04		
SREV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
SREV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
DEV	TIME IN	DATE		1			++					
SKE V												
SREV SREV	TIME OUT	DATE		1			++					

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L572	15-08MS2		Tag:					M	leasure	ed: 3/	24/2020 10:	51:30 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Val	ue Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
REV	EXTRACTION TIME	PREP366	66666279	1		hrs	++					
REV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
REV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
REV	POST FILTER PH	TEXT		1		units	++			9.02		
REV	PRE FILTER PH	TEXT		1		units	++			9.04		
REV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
REV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
REV	TIME IN	DATE		1			++					
REV	TIME OUT	DATE		1			++					
REV	WEIGHT, DRY	PREP	5000	1		g	++					
VG4	93948CCV1		Tag:					IV	leasure	ed: 3/	24/2020 7:02	2:56 PM
tatus	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Val	ue Ext Qual	Signal
REV	EXTRACTION PH	TEXT		1		units	NEED			3.98		
REV	POST FILTER PH	TEXT		1		units	NEED			3.99		
REV	PRE FILTER PH	TEXT		1		units	NEED			4.02		
REV	TEMPERATURE	PREP	20.5	1		С	NEED	0.1	0.1	7.02		
	15-08MSD2		Tag:								0.5/0.000 0.4	
.512	19-001/1302		rag.					IV	leasure	ed: 3/	25/2020 3:14	1:22 AM
tatus	Parm_Stored	Type	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Val	ue Ext Qual	Signal
REV	EXTRACTION PH	TEXT		1		units	++			4.91		
REV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
REV	EXTRACTION TIME	PREP366	66666279	1		hrs	++					
REV	LEACHATE VOLUME	PREP	5011.7	1		mL	++					
REV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
REV	POST FILTER PH	TEXT		1		units	++			9.02		
REV	PRE FILTER PH	TEXT		1		units	++			9.04		
REV	RETAINED MOISTURE	TEXT		1		%	++			15.73		
REV	TEMPERATURE	PREP	20.1	1		С	++	0.1	0.1			
REV	TIME IN	DATE		1			++					
REV	TIME OUT	DATE		1			++					
REV	WEIGHT, DRY	PREP	5000	1		g	++					
.572 <sup>-</sup>	15-08DUP		Tag:					M	leasure	ed: 3/	25/2020 11:2	25:48 AN
tatus	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Val	ue Ext Qual	Signal
REV	EXTRACTION PH	TEXT		1		units	++			4.91		
REV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
REV	EXTRACTION TIME	PREP	28.5	1		hrs	++					
REV	LEACHATE VOLUME	PREP	5020.2	1		mL	++					
REV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
REV	POST FILTER PH	TEXT		1		units	++			8.97		
DE\ (	PRE FILTER PH	TEXT		1		units	++			9.01		
REV	RETAINED MOISTURE	TEXT		1		%	++			11.16		
		DDED	20.3	1		С	++	0.1	0.1			
REV	TEMPERATURE	PREP	20.0									
REV REV	TEMPERATURE TIME IN	DATE	20.0	1			++					
SREV SREV SREV SREV SREV			20.0	1 1			++ ++					

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WG49	3948LFB1		Tag:					М	easure	ed: 3/25	2020 7:37	:14 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	66666861	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5005.2	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			6.12		
SREV	PRE FILTER PH	TEXT		1		units	++			6.16		
SREV	TEMPERATURE	PREP	20.7	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
WG49	93948LFB2		Tag:					М	easure	d: 3/26	2020 3:48	:40 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			4.91		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP366	66666861	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5005.2	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			6.12		
SREV	PRE FILTER PH	TEXT		1		units	++			6.16		
SREV	TEMPERATURE	PREP	20.7	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
WG49	93948CCV2		Tag:					М	easure	d: 3/26	2020 12:0	0:06 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.98		
SREV	POST FILTER PH	TEXT		1		units	NEED			3.97		
SREV	PRE FILTER PH	TEXT		1		units	NEED			4.01		
SREV	TEMPERATURE	PREP	20.9	1		С	NEED	0.1	0.1			

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Bench Sheet List: I-RFA-CN-FREE QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT SOP Ref: SOPSO036

WG493997



ACZ Laboratories, Inc

Instrument ID: SOILSPREP Analyst: GKH

End Date/Time: 03/27/2020 16:00 Start Date/Time: 03/24/2020 8:00 Create Date: 03/20/2020 9:59 ACZ Dept: 20

Extracti Temper

on Time ature

Time ŏ Leachat Retaine Time In

Volume Moisture Filter pH Filter pH Weight

%

(mL)

6

(units) (units)

<u></u>

(nuits)

% Ë

Temper ature

Extracti Extracti

o

Hd uo

Particle E Size over 5

SubSX Pri Analysis Date

Client ID

ACZ ID

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(hrs)

<u>©</u>

21.6	21.6	21.6	21.6	22.1	21.1	20.3	20.1	20.4	20.2	20.2	20.2	20.2	20.2	20.2	20.4	20.6	21.2	20.6	22.1	22.1	21.2
				24.1666666651	30.9999999994	55.9999999988	55.999999988	84	28.633333332	28.833333332	28.833333332	28.833333332	28.83333333	28.7499999994	28.5	29.0833333331		29.91666666657	24.1660666651	24.1666666651	
				3/25/2020 9:50:00 AM	3/25/2020 4:40:00 PM	3/26/2020 5:40:00 PM	3/26/2020 5:40:00 PM	3/26/2020 9:40:00 AM	3/25/2020 2:30:00 PM	3/25/2020 2:25:00 PM	3/25/2020 2:10:00 PM	3/25/2020 2:45:00 PM		3/25/2020 3:35:00 PM	3/25/2020 9:50:00 AM	3/25/2020 9:50:00 AM					
				3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM		3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	3/24/2020 9:40:00 AM	
					18.26			18.40	19.25	19.25	19.25	19.25	19.25	14.61	12.81	10.66		11.37			
				5003.9	5001.7	4925.7	5059.2	4967.6	5006.6	5006.6	5006.6	5006.6	5006.6	5016.1	5018.7	5003.7		5024.3	5003.9	5003.9	
				0	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000		2000	0	0	
10.06	7.02	2.09	3.98	5.87	9.05	8.99	8.98	8.93	7.84	7.84	7.84	7.84	7.84	8.36	8.35	8.09	3.98	7.84	5.87	5.87	000
10.06	7.02	5.09	4.01	2.67	9.03	9.07	9.15	8.85	7.76	7.76	7.76	7.76	7.76	8.27	8.33	8.09	3.99	7.93	2.67	5.67	000
				23	23	23	23	23	23	23	23	23	23	23	23	23		23	23	23	
10.04	7.01	2.04	3.95	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	4.03	5.01	5.01	5.01	5
					0	0	0	0	0	0	0	0	0	19.41	15.19	14.47		0			
03/24/20 8:00	03/24/20 11:48	03/24/20 15:37	03/24/20 19:25	03/24/20 23:14	03/25/20 3:02	03/25/20 6:51	03/25/20 10:39	03/25/20 14:28	03/25/20 18:17	03/25/20 22:05	03/26/20 1:54	03/26/20 5:42	03/26/20 9:31	03/26/20 13:19	03/26/20 17:08	03/26/20 20:57	03/27/20 0:45	03/27/20 4:34	03/27/20 8:22	03/27/20 12:11	00,100,00
As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	•
NONE	NONE	NONE	PCN58541	NONE	WRSB207_105-115	WRSB207_125-135	WRSB207_140-145	WRSB207_150-155	WRSB234_0.5-3	MS200120-3	MS200120-3	11200302-4	11200302-4	NONE	WRSB234_6-15	WRSB223_0.5-3	PCN58541	WRSB223_6-15	11200302-4	MS200120-3	001100
WG493997CSTD1	WG493997CSTD2	WG493997CSTD3	WG493997ICV	WG493997PBS	L57215-09	L57215-10	L57215-11	L57215-12	L57215-13	L57215-13MS1	L57215-13MSD1	L57215-13MS2	L57215-13MSD2	L57215-13DUP	L57215-14	L57215-15	WG493997CCV1	L57215-16	WG493997LFB1	WG493997LFB2	
<u>-</u>	2	3	4	2	9	7	8	6	9	=	12	13	4	15	16	17	8	19	20	21	1

CAKH 3/30/20 Initials, Date

114 4-2-20-1

3/30/2020 9:25:52 AM 22620

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Internal Comments

Report Comments:

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE Group ID: SP-G-MWMT

Method Ref: ASTM E2242-13

SOP Ref: SOPSO036

BUCKET(2) | Soils hallway

ICPMS Spike ICPMS Spike

L57215-13MS1 L57215-13MS2

ICP Spike ICP Spike

57215-13MSD2

57215-14 L57215-15 L57215-16

L57215-13MSD1

BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway

L57215-09 L57215-10

Sample

L57215-11 L57215-12 L57215-13

Login Comments

BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway

ICPMS LFB

WG493997LFB2

7 7 7 8 8 8 8 8 8 8 8 8

WG493997CSTD3 WG493997CSTD2 WG493997CSTD1

WG4939971CV

PH QC

WG493997CCV1

# WG493997



SOILSPREP	СКН	20	Create Date: 03/20/2020 9:59	Start Date/Time: 03/24/2020 8:00	End Date/Time: 03/27/2020 16:00
Instrument ID: SOILSPREP	Analyst: GKH	ACZ Dept: 20	Create Date:	Start Date/Time:	End Date/Time:
				<b>U</b>	

**ACZ** Laboratories, Inc

AREV: Initials, Date	7/200	onev. Initials, Date	3/30/2020 9:25:52 AM 22620
comments:	Comments		Page 2 of 2
Report Comments:	Internal Comments		

L57215-2007241055

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ACZ Laboratories, Inc.		Data Review	er: GK	Н
Geochemistry Department		Date: 3/30	lan	•
Data Review and Reagents		7 -0,	140	
Analyst: <b>BKH</b>		Approved: Date:	en A	
		Daic.	J- J-	$\bigcirc$
Workgroup: WG-493917		-(	1	
Analysis Date: $3/24/20 - 3/27/26$				
Sample type used: SO				
Extraction Digestion / Analysis (Prep) Ca	alc:			
				<del></del>
		Yes	No.	N/A
1. Is the raw data checked to the computer print	out for transcription errors?	V	7	
2. Is the %solid or TS attached for dilution factor	ors?			
3. Were proper volumes of reagents used per fir	nal volume?			1
4. Was the proper sub-sample used (as received	L client prep /2000 /500 /250	dry		
4. Was the proper sub-sample used (as received R&P, RPLL)?	i, chem prep,<2000, <300, <230,	ury,		
5. Were the dilution factor calculation checked (	(final volume, weight, %solid)?			1
6. Did the RPD pass?				+ /
o. Did tile KFD pass:				V
7. Does all the spike information correlate with	each other?			
8. Is the appropriate spike in the computer-desi	gnated line?			
9. Are all errors properly corrected (single-line	crossout, dated & initialed)?	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
10. Is the standard/reagent information comple	te and current?	./	//	
11. Is your instrument calibration passing (and	included in the data nackage if r	eeded)?		-
		<i>\</i>		
FOR SREV: QA/QC approval for initial traini	ng or 2 sets of initials for WG &	LIMS?		
Standard/Reagent/Equipment*	PCN/SCN/LOT #*	Expi	ration l	Date
BUFFER 10	59339	3/	31/21	
1 7	60476	7/3	31/2i	
<i>y</i> 2	59293	12/3	1/20	
			+	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			-	
				4.444/-77-7
*Workgroup documentation must include the lot nu	ımber(s) of all disposable vessels us	ed for volumetri	c measure	ments.
	· · · · · · · · · · · · · · · · · · ·			
Comments:				
			+++-	
			<del></del>	

### **METEORIC WATER MOBILITY TEST**

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487 Analyst: GKH
Date: Start Time: 3/24/20 8a

End Time:

3/24/20 8a 3/27/20 4p

Workgroup Number: Wg493997

### Loaded Sample Wet Weight

Sx Wet Weight
(g)
5203
5163
5146
5199
5225
5262
5160
5158
5254

H2O rate start: 3.5mL/Min H2O rate finish: 3.5mL/Min

Filter Type/pore size: .45um

**Special Comments:** 

L57215-13 and its duplicate bucket (MS/MSD)were different material. The duplicate bucket has much larger aggregates that were over 5cm where as the L57215-13 bucket didn't have any material over 5cm.

**Dry Weight Calculations** 

Sx Number	Sx Weight (g) (From above)	(x)	% Solid	=	Dry Sx Weight (g)	+	Cubetainer Weight (g)	=	Target Leachate & Cubtainer Wt (g)
L57215-09	5203	Х	0.961082202	=	5000.510696	+	137.6	=	5138.1107
L57215-10	5163	X	0.968469188	=	5000.206418	+	138.6	=	5138.80642
L57215-11	5146	Х	0.971683407	=	5000.282811	+	138.2	=	5138.48281
L57215-12	5199	×	0.96182908	=	5000.549388	+	136.9	=	5137.44939
L57215-13	5225	Х	0.956950902	=	5000.068465	+	142	=	5142.06846
L57215-13 DUP	5262	x	0.950337313	=	5000.674941	+	136.8	=	5137.47494
L57215-14	5160	Х	0.969159347	=	5000.862228	+	142.5	=	5143.36223
L57215-15	5158	Х	0.969532422	=	5000.848235	+	132.1	=	5132.94823
L57215-16	5254	Х	0.9516867	Ξ	5000.161923	+	137.6	=	5137.76192

### Final Leachate Weight

Sx Number	Actual Leachate & Cubetainer	-	Cubetainer Wt (g)	=	Final Leachate Volume (mL)
L57215-09	5139.3	-	137.6	=	5001.7
L57215-10	1834.6	-	138.6	=	1696
L57215-11	2275.3	-	138.2	11	2137.1
L57215-12	5104.5	•	136.9	=	4967.6
L57215-13	5148.6	-	142	=	5006.6
L57215-13 DUP	5152.9	-	136.8	11	5016.1
L57215-14	5161.2	-	142.5	Ħ	5018.7
L57215-15	5135.8	-	132.1	"	5003.7
L57215-16	5161.9	-	137.6	=	5024.3

Comments:

L7215-01/11:Failed Column Extraction. Sample was extracted for 8 hours via MWMT roll using proper caculat

Calculations can be found on WG benchsheet.

L57215-10: 4925.7 mL is the total Leachate from MWMT Column and Extraction Fluid from MWMT Roll
L57215-11: 5059.2 mL is the total Leachate from MWMT Column and Extraction Fluid from MWMT Roll

Qualtrax ID: 1220

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### **METEORIC WATER MOBILITY TEST**

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487 Analyst: **GKH**Date:

Start Time: 3/24/20 8a
End Time: 3/27/20 4p

Workgroup Number: WG493997

### **Feed Moisture**

Sx Number	Pan Weight (g)	Wet Sx + Pan	Dry Sx + Pan	% Solid	% Feed
3x Number	raii weigiit (g)	Weight (g)	Weight (g)	% 3011u	Moisture
L57215-09	160.78	662.35	642.83	96.10822019	3.891779811
L57215-10	137.24	638.02	622.23	96.84691881	3.153081193
L57215-11	141.44	648.21	633.86	97.16834067	2.831659333
L57215-12	151.29	663.46	643.91	96.18290802	3.817091981
L57215-13	150.58	658.14	636.29	95.69509024	4.304909764
L57215-13 DUP	148.83	657.26	632.01	95.03373129	4.96626871
L57215-14	145.39	664.51	648.5	96.91593466	3.084065341
L57215-15	151.45	657.89	642.46	96.95324224	3.04675776
L57215-16	146.49	662.29	637.37	95.16867003	4.831329973

### Screening-Particle Size

Sx Number	Sx Weight (g)	Sx > 5 cm (g)	Sx < 5 cm (g)	%Sx > 5cm	%Sx < 5cm
L57215-09	5203	0	5203	0	100
L57215-10	5163	0	5163	0	100
L57215-11	5146	0	5146	0	100
L57215-12	5199	0	5199	0	100
L57215-13	5225	0	5225	0	100
L57215-13 DUP	8887.76	1725.29	7162.47	19.41197782	80.58802218
L57215-14	9790.65	1487.53	8303.12	15.19337327	84.80662673
L57215-15	6920.19	1001.61	5918.58	14.47373555	85.52626445
L57215-16	5254	0	5254	0	100

### **Residual Moisture**

Sx Number	Pan Weight (g)	Wet Sx + Pan	Dry Sx + Pan	% Solid	% Res. Moisture
3x Number	ran weight (g)	Weight (g)	Weight (g)	76 3011 <b>u</b>	70 Nes. Moisture
L57215-09	77.54	382.19	326.55	81.73641884	18.26358116
L57215-10	N/A	N/A	N/A	#VALUE!	#VALUE!
L57215-11	N/A	N/A	N/A	#VALUE!	#VALUE!
L57215-12	72.87	367.38	313.18	81.5965502	18.4034498
L57215-13	72.26	361.43	305.75	80.74489055	19.25510945
L57215-13 DUP	73.98	306.27	272.33	85.38895346	14.61104654
L57215-14	73.32	405.21	362.69	87.18852632	12.81147368
L57215-15	72.55	351.41	321.67	89.33515025	10.66484975
L57215-16	76.43	305.85	279.76	88.62784413	11.37215587

Time and Temperature for Residual Moisture: 24HR @105c

Sample Description: Sand/ Small-Mid sized aggregate Centrifuge or pre-filter? Centrifuge L57215-10/11

Observation of changes:

N/A

Storage Conditions of "as rec" sample: Room

Qualtrax ID: 1220 Revision: 2 Page 230 of 251

Bench Sheet List: I-RFA-CN-FREE QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT



WG493997

### ACZ Laboratories, Inc

Create Date: 03/20/2020 9:59 Instrument ID: SOILSPREP ACZ Dept: 20 Analyst: Start Date/Time:

End Date/Time:

	Dry Leachate Retained Time In Time Out Extractio Ter Weight Volume Moisture	(g) (mL) (%) (hrs) (C)	7	7.6		22					200								200		74			
	Pre Post Filter pH Filter pH	(units) (units)	20.01	7.02	2.00	401 200				1						1	27 A 77 A		8.04 8.03		145 1.84			900
	Extractio Extraction n pH n Tempera ture	(C																						
	Extractio n pH	(units)	10.04	7.01	2.04	395	5.0				-								٠,	403	200	1	ļ	
	Particle Size over 5 cm	(%)																						
	Analysis Date																						. 4	
	SubSX Pri																						-	
SOP Ref: SOPSO036	Client ID Sut		E NC	NONE	NONE	PCN58541	NONE	WRSB207_105-115	WRSB207_125-135	WRSB207_140-145	WRSB207_150-155	WRSB234_0.5-3	MS200120-3	MS200120-3	11200302-4	11200302-4	NONE	WRSB234_6-15	WRSB223_0.5-3	PCN58541	WRSB223_6-15	11200302-4	MS200120-3	Motorito
SOP Ref: SOP	ACZ ID		10130700000 VAI	WG493997C31D1	WG493997CSTD3	WG493997ICV	WG493997PBS	L57215-09				L57215-13	L57215-13MS1	L57215-13MSD1	L57215-13MS2	L57215-13MSD2	L57215-13DUP	L57215-14	L57215-15	WG493997CCV1	L57215-16	WG493997LFB1	VAIC 4020071 EB2	VVG493997LTDV
	₩ o			_	v (c	+	ທ	9	7	∞	တ	9	F	12	13	14	15	16	17	18	19	20	1	7

AREV:

Initials, Date

SREV:

Initials, Date

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Report Comments:

Internal Comments

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE Group ID: SP-G-MWMT

Method Ref: ASTM E2242-13

**SOP Ref: SOPS0036** 

BUCKET | Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway

> L57215-10 L57215-11 L57215-12 57215-13

57215-09 Sample

Login Comments

BUCKET(2) | Soits hallway

ICPMS Spike ICPMS Spike

ICP Spike ICP Spike

L57215-13MSD2

L57215-14 57215-15 157215-16

L57215-13MSD1

.57215-13MS2 -57215-13MS1

BUCKET | Soils hallway BUCKET || Soils hallway BUCKET | Soils hallway

얼된 pH QC PH QC рнас PHOC

WG493997CSTD2 WG493997CSTD3 WG493997CSTD1 WG493997CCV1

WG493997



Create Date: 03/20/2020 9:59 Instrument ID: SOILSPREP ACZ Dept: 20 Analyst: Start Date/Time: End Date/Time:

ACZ Laboratories, Inc

KEHINED

3211.1

L57215-10 HEACHATE

[57215-1] 2137.1

ICPMS LFB

WG493997LFB2

WG493997ICV

EXIVIANT 2802

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Initials, Date

SREV:

Initials, Date

AREV:

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Internal Comments

Report Comments:

Workgroup Review and Approval

### WG493997

Date Reported: 02-Apr-20

Run ID: R1775939 Date Analyzed: 24-Mar-20

ICAL Workgroup:

Instrument ID: SOILSPREP

WG4	93997ICV		Tag:					M	leasure	d:	3/24/	2020 7:25	:42 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.95			
SREV	POST FILTER PH	TEXT		1		units	NEED			3.98			
SREV	PRE FILTER PH	TEXT		1		units	NEED			4.01			
SREV	TEMPERATURE	PREP	21.6	1		С	NEED	0.1	0.1				
WG4	93997PBS		Tag:					M	leasure	ed:	3/24/	2020 11:1	4:16 PN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.01			
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	PREP366	66665114	1		hrs	++						
SREV	LEACHATE VOLUME	PREP	5003.9	1		mL	++						
SREV	POST FILTER PH	TEXT		1		units	++			5.87			
SREV	PRE FILTER PH	TEXT		1		units	++			5.67			
SREV	TEMPERATURE	PREP	22.1	1		С	++	0.1	0.1				
SREV	TIME IN	DATE		1			++						
SREV	TIME OUT	DATE		1			++						
SREV	WEIGHT, DRY	PREP	0	1		g	++						
L572	15-09		Tag:					M	leasure	d:	3/25/	2020 3:02	:50 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01		TA	
SREV	EXTRACTION TEMPERATURE	K-MWMT	23.0	1		С	++	0.1	0.1			TA	
SREV	EXTRACTION TIME	K-MWMT	31	1		hrs	++					TA	
SREV	LEACHATE VOLUME	'K-MWMT	5001.7	1		mL	++					TA	
SREV	PARTICLE SIZE OVER 5 CM	K-MWMT	0	1		%	++					TA	
SREV	POST FILTER PH	K-MWMT		1		units	++			9.05		TA	
SREV	PRE FILTER PH	K-MWMT		1		units	++			9.03		TA	
SREV	RETAINED MOISTURE	K-MWMT		1		%	++			18.26	3	TA	
SREV	TEMPERATURE	K-MWMT	21.1	1		С	++	0.1	0.1			TA	
SREV	TIME IN	K-MWMT		1			++					TA	
SREV	TIME OUT	K-MWMT		1			++					TA	
SREV	WEIGHT, DRY	K-MWMT	5000	1		g	++					TA	

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L572	15-10		Tag:					N	leasure	ed:	3/25/	2020 6:51	:24 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01			
SREV	EXTRACTION TEMPERATURE	K-MWMT	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	K-MWMT	56	1		hrs	++						
SREV	LEACHATE VOLUME	'K-MWMT	4925.7	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	K-MWMT	0	1		%	++						
SREV	POST FILTER PH	K-MWMT		1		units	++			8.99			
SREV	PRE FILTER PH	K-MWMT		1		units	++			9.07			
SREV	TEMPERATURE	'K-MWMT	20.3	1		С	++	0.1	0.1				
SREV	TIME IN	'K-MWMT		1			++						
SREV	TIME OUT	'K-MWMT		1			++						
SREV	WEIGHT, DRY	'K-MWMT	5000	1		g	++						
L572	15-11		Tag:					N	leasure	ed:	3/25/	2020 10:3	9:58 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01			
SREV	EXTRACTION TEMPERATURE	'K-MWMT	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	K-MWMT	56	1		hrs	++						
SREV	LEACHATE VOLUME	'K-MWMT	5059.2	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	'K-MWMT	0	1		%	++						
SREV	POST FILTER PH	K-MWMT		1		units	++			8.98			
SREV	PRE FILTER PH	K-MWMT		1		units	++			9.15			
SREV	TEMPERATURE	K-MWMT	20.1	1		С	++	0.1	0.1				
SREV	TIME IN	K-MWMT		1			++						
SREV	TIME OUT	'K-MWMT		1			++						
SREV	WEIGHT, DRY	'K-MWMT	5000	1		g	++						
L572	15-12		Tag:					N	leasure	ed:	3/25/	2020 2:28	:32 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01			
SREV	EXTRACTION TEMPERATURE	K-MWMT	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	K-MWMT	48	1		hrs	++						
SREV	LEACHATE VOLUME	K-MWMT	4967.6	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	K-MWMT	0	1		%	++						
SREV	POST FILTER PH	K-MWMT		1		units	++			8.93			
	PRE FILTER PH	K-MWMT		1		units	++			8.85			
		'K-MWMT		1		%	++			18.4	0		
SREV	RETAINED MOISTURE							0.1	0.1				
SREV SREV	RETAINED MOISTURE TEMPERATURE	K-MWMT	20.4	1		С	++	0.1	0.1				
SREV SREV SREV		'K-MWMT	20.4	1 1		C	++	0.1	0.1				
SREV SREV	TEMPERATURE		20.4			C		0.1	0.1				

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L572	15-13		Tag:					M	easure	ed: 3/25/	2020 6:17	:06 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01		
SREV	EXTRACTION TEMPERATURE	'K-MWMT	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	K-MWMT	28.83333	1		hrs	++					
SREV	LEACHATE VOLUME	K-MWMT	5006.6	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	K-MWMT	0	1		%	++					
SREV	POST FILTER PH	K-MWMT		1		units	++			7.84		
SREV	PRE FILTER PH	K-MWMT		1		units	++			7.76		
SREV	RETAINED MOISTURE	'K-MWMT		1		%	++			19.25		
SREV	TEMPERATURE	'K-MWMT	20.2	1		С	++	0.1	0.1			
SREV	TIME IN	K-MWMT		1			++					
SREV	TIME OUT	K-MWMT		1			++					
SREV	WEIGHT, DRY	K-MWMT	5000	1		g	++					
L572	15-13MS1		Tag:					M	easure	ed: 3/25/	2020 10:0	5:40 PI
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.01		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP33	3333331975	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5006.6	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			7.84		
SREV	PRE FILTER PH	TEXT		1		units	++			7.76		
SREV	RETAINED MOISTURE	TEXT		1		%	++			19.25		
SREV	TEMPERATURE	PREP	20.2	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	5000	1		g	++					
L572	15-13MSD1		Tag:					M	easure	ed: 3/26/	2020 1:54	:14 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.01		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP33	3333331975	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5006.6	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
SREV	POST FILTER PH	TEXT		1		units	++			7.84		
	PRE FILTER PH	TEXT		1		units	++			7.76		
SREV		TEXT		1		%	++			19.25		
	RETAINED MOISTURE							0.1	0.1			
SREV	RETAINED MOISTURE TEMPERATURE		20.2	1		С	++	U. I	U. I			
SREV SREV		PREP	20.2	1 1		C	++	0.1	0.1			
SREV SREV SREV SREV SREV	TEMPERATURE		20.2			C		0.1	0.1			

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New   EXTRACTION PH	L572	15-13MS2		Tag:					M	easure	ed: 3/26/	2020 5:42	:48 AM
REV EXTRACTION REG 23 1 C ++ 0.1 0.1  TEMPERATURE REV EXTRACTION TIME PREP3333331975 1 hrs ++  REV EXTRACTION TIME PREP 5006.6 1 mL ++  REV PARTICLE SEZOVERS 5.00 PREP 0 1 1 % ++  REV PARTICLE SEZOVERS 5.00 PREP 0 1 1 % ++  REV PARTICLE SEZOVERS 5.00 PREP 0 2 1 1 % ++  REV PREPATICLE SEZOVERS 5.00 PREP 0 2 1 1 % ++  REV PREPATICLE SEZOVERS 5.00 PREP 0 2 1 0 C ++ 0.1 0.1  REV PREPATICLE SEZOVERS 5.00 PREP 5000 1 g ++  SZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Арру	MDL	PQL	Text Value	Ext Qual	Signal
TEMPERATURE  REV EXTRACTION TIME PREP \$500.6 1 mL ++  REV LEACHATE VOLUME PREP \$500.6 1 mL ++  REV LEACHATE VOLUME PREP \$500.6 1 mL ++  REV PORTELER PH TEXT 1 units ++ 7.84  REV REFAINED MOSTURE TEXT 1 units ++ 7.76  REV REFAINED MOSTURE TEXT 1 miles ++ 19.25  REV TEMPERATURE PREP 20.2 1 C ++ 0.1 0.1  REV WEIGHT, DRY PREP 5000 1 g ++   ST215-13MSD2  Tag:  Measured: 3/26/2020 9:31:22 AM  REV EXTRACTION PH TEXT 1 units ++ 5.01  REV EXTRACTION PH TEXT 1 units ++ 5.01  TEMPERATURE PREP 5000 1 mL ++ 5.01  REV EXTRACTION PH TEXT 1 units ++ 5.01  TEMPERATURE PREP 500.6 1 mL ++ 5.01  REV EXTRACTION PH TEXT 1 units ++ 7.84  REV LEACHATE VOLUME PREP 500.6 1 mL ++ 7.84  REV PREPATURE PREP 500.6 1 mL ++ 7.84  REV PREPATURE PREP 500.6 1 mL ++ 7.76  REV REV REVERTER PH TEXT 1 munits ++ 7.76  REV REV REVERTER PH TEXT 1 munits ++ 7.76  REV TIME ND DATE 1 munits ++ 7.76  REV TIME ND DATE 1 munits ++ 7.76  REV TIME ND DATE 1 munits ++ 7.76  REV TIME ND DATE 1 munits ++ 7.76  REV TIME ND DATE 1 munits ++ 7.76  REV TIME ND DATE 1 mmL ++ 7.76  REV EXTRACTION PH REV SOLUTION PH PREP 500.0 1 g ++ 7.76  REV TIME ND DATE 1 mmL ++ 7.76  REV EXTRACTION PH TEXT 1 munits ++ 7.76  REV EXTRACTION PH REV SOLUTION PH PREP 500.0 1 g ++ 7.76  REV TIME ND DATE 1 mL munits ++ 8.36  REV EXTRACTION PH REV SOLUTION PH PREP 501.1 mL ++ 7.76  REV EXTRACTION PH REXT 1 munits ++ 8.36  REV EXTRACTION PH REXT 1 munits ++ 8.36  REV EXTRACTION PH REXT 1 munits ++ 8.37  REV TIME ND DATE 1 mL munits ++ 8.37  REV TIME ND DATE 1 mL munits ++ 8.37  REV TIME ND DATE 1 mL munits ++ 8.37  REV TIME ND DATE 1 mL munits ++ 8.37  REV TIME ND DATE 1	SREV	EXTRACTION PH	TEXT		1		units	++			5.01		
EVEV EXTRACTION TIME PREP)333331975 1 hrs ++  REV LEACHATE VOLUME PREP 500.6 1 mL ++  REV PARTICLE SIZE OVERS SCM PREP 0 1 1 % ++  REV PARTICLE SIZE OVERS SCM PREP 0 1 1 % ++  REV PRETER PH TEXT 1 units ++  TEXT 1 units ++  T.7.6  REV PRETER PH TEXT 1 units ++  T.7.6  REV PREPATURE PREP 20.2 1 C ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV WEIGHT. DRY PREP 5000 1 g ++  ST7215-13MSD2  Tag:  Measured: 3/26/2020 9:31:22 AM  Measured: 3/26/2020 9:31:22 AM  MEASURED: 3/26/2020 9:31:22 AM  MEASURED: SUBJECT SIZE STATES SUBJECT SIZE SUBJECT	SREV		REG	23	1		С	++	0.1	0.1			
REV PARTICLE SIZE OVER 5 CM PREP 0 1 % ++	SREV		PREP333	33331975	1		hrs	++					
Note   Post Filter PH	SREV	LEACHATE VOLUME	PREP	5006.6	1		mL	++					
New   Prefeter   New	SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
REV RETAINED MOISTURE TEXT 1 % ++ 0.1 0.1 0.1 19.25  REV THEMERATURE PREP 20.2 1 C ++ 0.1 0.1 0.1 19.25  REV TIME ON DATE 1 ++ 12.25  REV TIME ON DATE 1 ++ 12.25  REV TIME ON DATE 1 ++ 12.25  REV WEIGHT, DRY PREP 5000 1 g ++ 12.25  TAGE:    Measured: 3/26/2020 9:31:22 AM	SREV	POST FILTER PH	TEXT		1		units	++			7.84		
REV   TEMPERATURE   PREP   20.2   1	SREV	PRE FILTER PH	TEXT		1		units	++			7.76		
New Note	SREV	RETAINED MOISTURE	TEXT		1		%	++			19.25		
TIME OUT	SREV	TEMPERATURE	PREP	20.2	1		С	++	0.1	0.1			
Time out	SREV	TIME IN			1			++					
Tag:	SREV	TIME OUT						++					
ST215-13MSD2   Tag:   Measured: 3/26/2020 9:31:22 AM	SREV	WEIGHT, DRY		5000			а						
### Apple   Text   Ap					•		3						
REV EXTRACTION H REG 23 1 C ++ 0.1 0.1 REG 23 1 C ++ 0.1 0.1 REG EXTRACTION REG 23 1 C ++ 0.1 0.1 REV EXTRACTION TIME PREP33333331975 1 hrs ++ REV LEACHATE VOLUME PREP 5006.6 1 mL ++ REV PARTICLE SIZE OVER 5 CM PREP 0 1 % ++ REV PARTICLE SIZE OVER 5 CM PREP 1 MILE NO.1 0.1 REV PARTICLE SIZE OVER 5 CM PREP 0 1 % ++ REV PREPATURE PREP33333331975 1 hrs ++ REV PREPATURE PREP3403333331975 1 hrs ++ REV PREPATURE PREP3500.6 1 mL ++ REV PREPATURE PREP3500.6 1 mL ++ REV REV RETAINED MOISTURE TEXT 1 milts ++ REV TIME OUT DATE 1 ++ REV WEIGHT. DRY PREP 5000 1 g ++  TAGE  TAGE  TAGE  Measured: 3/26/2020 1:19:56 PM  Measured: 3/26/2020 1:19:56 PM  MEASURED: SIZE OVER 5 CM PREP3999999418 1 hrs ++ REV EXTRACTION PH TEXT 1 milts ++ REV EXTRACTION TIME PREP39999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION REG 23 1 C ++ 0.1 0.1 REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV EXTRACTION TIME PREP30999999418 1 hrs ++ REV PARTICLE SIZE OVER 5 CM PREP 5016.1 1 mL ++ REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 % ++ REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 milts ++ REV PREPITER PH TEXT 1 units ++ REV RETAINED MOISTURE TEXT 1 units ++ REV RETAINED MOISTURE TEXT 1 units ++ REV RETAINED MOISTURE TEXT 1 units ++ REV TIME OUT DATE 1 ++ REV TIME OUT	L572	15-13MSD2		Tag:					M	easure	ed: 3/26/	2020 9:31	:22 AM
REV EXTRACTION REG 23 1 C ++ 0.1 0.1   TEMPERATURE REV EXTRACTION TIME PREP}33333331975 1 hrs ++   REV EXTRACTION TIME PREP}5006.6 1 mL ++   REV PARTICLE SIZE OVER 5 CM PREP 0 1 % ++   REV POST FILTER PH TEXT 1 units ++   REV RETAINED MOISTURE TEXT 1 wits ++   REV TEMPERATURE PREP 5000 1 g ++    TAGE  TAG	Status	Parm_Stored	Type	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
TEMPERATURE EXTRACTION TIME PREP33333331975 1 hrs ++ REV LEACHATE VOLUME PREP 5006.6 1 mL ++ REV PARTICLE SIZE OVER 5CM PREP 0 1 % ++ REV PARTICLE SIZE OVER 5CM PREP 0 1 % ++ REV PARTICLE SIZE OVER 5CM PREP 0 1 % ++ REV PARTICLE SIZE OVER 5CM PREP 0 1 % ++ REV PARTICLE SIZE OVER 5CM PREP 0 1 % ++ REV PARTICLE SIZE OVER 5CM PREP 20.2 1 Units ++ REV RETAINED MOISTURE TEXT 1 Units ++ REV TIME IN DATE 1 ++ REV TIME OUT DATE 1 ++ REV WEIGHT, DRY PREP 5000 1 g ++  57215-13DUP Tag:  Measured: 3/26/2020 1:19:56 PM  atus Parm_Stored Type Value Dil Qual Units Appv MDL PQL Text Value Ext Qual Signa  REV EXTRACTION PH TEXT 1 Units ++ REV EXTRACTION REG 23 1 C ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)9999999418 1 hrs ++ REV EXTRACTION TIME PREP)99999999418 1 hrs ++ REV EXTRACTION TIME PREP)99999999418 1 hrs ++ REV EXTRACTION TIME PREP)99999999999999999999999999999999999	SREV	EXTRACTION PH	TEXT		1		units	++			5.01		
REV LEACHATE VOLUME PREP 5006.6 1 mL ++ REV PARTICLE SIZE OVER 5 CM PREP 0 1 % ++ REV POST FILTER PH TEXT 1 units ++ REV POST FILTER PH TEXT 1 units ++	SREV		REG	23	1		С	++	0.1	0.1			
REV PARTICLE SIZE OVER 5 CM PREP 0 1 1 % ++  REV POST FILTER PH TEXT 1 units ++  REV PRE FILTER PH TEXT 1 units ++  REV PRE FILTER PH TEXT 1 units ++  REV RETAINED MOISTURE TEXT 1 0 4 ++  REV TIME IN DATE 1 ++  REV TIME OUT DATE 1 ++  REV WEIGHT, DRY PREP 5000 1 g ++   TAG:  Measured: 3/26/2020 1:19:56 PM  Matus Parm_Stored Type Value Dil Qual Units Appv MDL PQL Text Value Ext Qual Signal  REV EXTRACTION PH TEXT 1 units ++  REV EXTRACTION TIME PREP)9999999418 1 hrs ++  REV EXTRACTION TIME PREP)9999999418 1 hrs ++  REV EXTRACTION TIME PREP) 5016.1 1 mL ++  REV DATE TIME Units ++  REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 % ++  REV POST FILTER PH TEXT 1 units ++  REV POST FILTER PH TEXT 1 units ++  REV PREFILTER PH TEXT 1 units ++  REV RETAINED MOISTURE TEXT 1 units ++  REV RETAINED MOISTURE TEXT 1 units ++  REV RETAINED MOISTURE TEXT 1 units ++  REV RETAINED MOISTURE TEXT 1 units ++  REV TEMPERATURE PREP 20.2 1 C ++  REV TEMPERATURE PREP 20.2 1 C ++  REV TEMPERATURE PREP 20.2 1 C ++  REV TIME IN DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV TIME OUT DATE 1 ++  REV PREFILER PH TEXT 1 1 UNITS ++  REV TIME OUT DATE 1 ++  R	SREV	EXTRACTION TIME	PREP333	33331975	1		hrs	++					
New York   New York	SREV	LEACHATE VOLUME	PREP	5006.6	1		mL	++					
REV PRE FILTER PH TEXT 1 units ++ 7.76 REV RETAINED MOISTURE TEXT 1 White N 19.25 REV TEMPERATURE PREP 20.2 1 C ++ 0.1 0.1 REV TIME IN DATE 1 ++ 1 REV WEIGHT, DRY PREP 5000 1 g ++  57215-13DUP Tag:  Measured: 3/26/2020 1:19:56 PM  atus Parm_Stored Type Value Dil Qual Units Appv MDL PQL Text Value Ext Qual Signa  REV EXTRACTION PH TEXT 1 units ++ 5.01  REV EXTRACTION TIME REG 23 1 C ++ 0.1 0.1  REV EXTRACTION TIME PREP)99999999418 1 hrs ++  REV EXTRACTION TIME PREP) 5016.1 1 mL ++  REV LEACHATE VOLUME PREP 5016.1 1 mL ++  REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 % ++  REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 units ++ 8.36  REV PREFILTER PH TEXT 1 units ++ 8.27  REV RETAINED MOISTURE TEXT 1 units ++ 8.27  REV RETAINED MOISTURE TEXT 1 units ++ 8.27  REV RETAINED MOISTURE TEXT 1 1 units ++ 8.27  REV RETAINED MOISTURE TEXT 1 1 units ++ 8.27  REV RETAINED MOISTURE TEXT 1 1 whits ++ 14.61  REV TIME IN DATE 1 ++ 14.61	SREV	PARTICLE SIZE OVER 5 CM	PREP	0	1		%	++					
REV RETAINED MOISTURE TEXT 1 % ++ 19.25  REV TEMPERATURE PREP 20.2 1 C ++ 0.1 0.1 0.1  REV TIME IN DATE 1 ++  REV TIME OUT DATE 1 ++  REV WEIGHT, DRY PREP 5000 1 g ++    Tag:    Measured: 3/26/2020 1:19:56 PM	SREV	POST FILTER PH	TEXT		1		units	++			7.84		
TEMPERATURE	SREV	PRE FILTER PH	TEXT		1		units	++			7.76		
Time in	SREV	RETAINED MOISTURE	TEXT		1		%	++			19.25		
Time out	SREV	TEMPERATURE	PREP	20.2	1		С	++	0.1	0.1			
Tag:   Measured: 3/26/2020 1:19:56 PM	SREV	TIME IN	DATE		1			++					
Tag:   Measured: 3/26/2020 1:19:56 PM   Signa   REV   EXTRACTION PH   TEXT   1   units   ++   5.01   Signa   REV   EXTRACTION TEMPERATURE   REV   EXTRACTION TIME   PREP)9999999418   1   hrs   ++   REV   LEACHATE VOLUME   PREP   5016.1   1   mL   ++   REV   PARTICLE SIZE OVER 5 CM   PREP   19.41   1   %   ++   REV   PARTICLE PH   TEXT   1   units   ++   8.36   REV   PREFILTER PH   TEXT   1   units   ++   8.27   REV   RETAINED MOISTURE   TEXT   1   wnits   ++   8.27   REV   RETAINED MOISTURE   TEXT   1   White in the service of the service	SREV	TIME OUT	DATE		1			++					
Apple	SREV	WEIGHT, DRY	PREP	5000	1		g	++					
Parm_Stored   Type   Value   Dil   Qual   Units   Appv   MDL   PQL   Text Value   Ext Qual   Signal	L572	15-13DUP		Tag:					M	easure	ed: 3/26/	2020 1:19	:56 PM
REV EXTRACTION REG 23 1 C ++ 0.1 0.1 TEMPERATURE  REV EXTRACTION TIME PREP)99999999418 1 hrs ++ REV LEACHATE VOLUME PREP 5016.1 1 mL ++ REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 % ++ REV POST FILTER PH TEXT 1 units ++ 8.36 REV PRE FILTER PH TEXT 1 units ++ 8.27 REV RETAINED MOISTURE TEXT 1 % ++ REV TIME IN DATE 1 ++ REV TIME OUT DATE 1 ++  **REV TIME OUT	Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
REV EXTRACTION REG 23 1 C ++ 0.1 0.1 TEMPERATURE  REV EXTRACTION TIME PREP)99999999418 1 hrs ++ REV LEACHATE VOLUME PREP 5016.1 1 mL ++ REV PARTICLE SIZE OVER 5 CM PREP 19.41 1 % ++ REV POST FILTER PH TEXT 1 units ++ 8.36 REV PRE FILTER PH TEXT 1 units ++ 8.27 REV RETAINED MOISTURE TEXT 1 % ++ REV TIME IN DATE 1 ++ REV TIME OUT DATE 1 ++  **REV TIME OUT	SREV	EXTRACTION PH	TEXT		1		units	++			5.01		
REV         LEACHATE VOLUME         PREP         5016.1         1         mL         ++           REV         PARTICLE SIZE OVER 5 CM         PREP         19.41         1         %         ++           REV         POST FILTER PH         TEXT         1         units         ++         8.36           REV         PRE FILTER PH         TEXT         1         units         ++         8.27           REV         REV IMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++         ++         ++	SREV			23	1			++	0.1	0.1			
REV         PARTICLE SIZE OVER 5 CM         PREP         19.41         1         %         ++           REV         POST FILTER PH         TEXT         1         units         ++         8.36           REV         PRE FILTER PH         TEXT         1         units         ++         8.27           REV         RETAINED MOISTURE         TEXT         1         %         ++         14.61           REV         TEMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++         ++	SREV	EXTRACTION TIME	PREP)99	99999418	1		hrs	++					
REV         PARTICLE SIZE OVER 5 CM         PREP         19.41         1         %         ++           REV         POST FILTER PH         TEXT         1         units         ++         8.36           REV         PRE FILTER PH         TEXT         1         units         ++         8.27           REV         RETAINED MOISTURE         TEXT         1         %         ++         14.61           REV         TEMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++         ++	SREV	LEACHATE VOLUME	PREP	5016.1	1		mL	++					
REV         POST FILTER PH         TEXT         1         units         ++         8.36           REV         PRE FILTER PH         TEXT         1         units         ++         8.27           REV         RETAINED MOISTURE         TEXT         1         %         ++         14.61           REV         TEMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++         ++	SREV				1			++					
REV         PRE FILTER PH         TEXT         1         units         ++         8.27           REV         RETAINED MOISTURE         TEXT         1         %         ++         14.61           REV         TEMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++         ++	SREV	POST FILTER PH									8.36		
REV         RETAINED MOISTURE         TEXT         1         %         ++         14.61           REV         TEMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++           REV         TIME OUT         DATE         1         ++	SREV	PRE FILTER PH											
REV         TEMPERATURE         PREP         20.2         1         C         ++         0.1         0.1           REV         TIME IN         DATE         1         ++           REV         TIME OUT         DATE         1         ++	SREV	RETAINED MOISTURE											
REV TIME IN DATE 1 ++  REV TIME OUT DATE 1 ++	SREV	TEMPERATURE		20.2	-				0 1	0.1	<del>.</del> .		
REV TIME OUT DATE 1 ++	SREV			20.2			J		Ų. I	5.1			
NEIGHT DDV	SREV												
NEV				5000			a						
	>: <b>\∟</b> V	- ,	I IXLI	5000	'		Э	• •					

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L572	15-14		Tag:					N	leasure	ed: 3/26/	2020 5:08	:30 PN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01		
SREV	EXTRACTION TEMPERATURE	'K-MWMT	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	'K-MWMT	28.5	1		hrs	++					
SREV	LEACHATE VOLUME	'K-MWMT	5018.7	1		mL	++					
REV	PARTICLE SIZE OVER 5 CM	'K-MWMT	15.19	1		%	++					
REV	POST FILTER PH	'K-MWMT		1		units	++			8.35		
REV	PRE FILTER PH	'K-MWMT		1		units	++			8.33		
SREV	RETAINED MOISTURE	'K-MWMT		1		%	++			12.81		
SREV	TEMPERATURE	K-MWMT	20.4	1		С	++	0.1	0.1			
REV	TIME IN	K-MWMT		1			++					
SREV	TIME OUT	K-MWMT		1			++					
SREV	WEIGHT, DRY	'K-MWMT	5000	1		g	++					
_572	15-15		Tag:					N	leasure	ed: 3/26/	2020 8:57	:04 PN
tatus	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
SREV	EXTRACTION PH	'K-MWMT		1		units	++			5.01		
REV	EXTRACTION TEMPERATURE	'K-MWMT	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	'K-MWMT	29.08333	1		hrs	++					
REV	LEACHATE VOLUME	'K-MWMT	5003.7	1		mL	++					
REV	PARTICLE SIZE OVER 5 CM	K-MWMT	14.47	1		%	++					
REV	POST FILTER PH	K-MWMT		1		units	++			8.09		
REV	PRE FILTER PH	K-MWMT		1		units	++			8.09		
REV	RETAINED MOISTURE	'K-MWMT		1		%	++			10.66		
REV	TEMPERATURE	'K-MWMT	20.6	1		С	++	0.1	0.1			
REV	TIME IN	K-MWMT		1			++					
REV	TIME OUT	'K-MWMT		1			++					
SREV	WEIGHT, DRY	K-MWMT	5000	1		g	++					
NG4	93997CCV1		Tag:					N	leasure	ed: 3/27/	2020 12:4	5:38 A
tatus	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
REV	EXTRACTION PH	TEXT		1		units	NEED			4.03		
SREV	POST FILTER PH	TEXT		1		units	NEED			3.98		
SREV	PRE FILTER PH	TEXT		1		units	NEED			3.99		
SREV	TEMPERATURE	PREP	21.2	1		С	NEED	0.1	0.1			
_572	15-16		Tag:					N	leasure	ed: 3/27/	2020 4:34	:12 AN
tatus	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signa
REV	EXTRACTION PH	'K-MWMT		1		units	++			5.01		
	EXTRACTION TEMPERATURE	'K-MWMT	23.0	1		С	++	0.1	0.1			
REV	EXTRACTION TIME	K-MWMT	29.91667	1		hrs	++					
	EXTRACTION TIME	K-MWMT	5024.3	1		mL	++					
SREV	LEACHATE VOLUME			1		%	++					
REV REV			0			units	++			7.84		
REV REV REV	LEACHATE VOLUME		0	1		armo						
REV REV REV	LEACHATE VOLUME PARTICLE SIZE OVER 5 CM	K-MWMT	0			units	++			7.93		
REV REV REV REV	LEACHATE VOLUME PARTICLE SIZE OVER 5 CM POST FILTER PH	K-MWMT	0	1			++ ++			7.93 11.37		
REV REV REV REV REV REV	LEACHATE VOLUME PARTICLE SIZE OVER 5 CM POST FILTER PH PRE FILTER PH	'K-MWMT 'K-MWMT 'K-MWMT	20.6	1 1		units		0.1	0.1			
SREV SREV SREV SREV SREV SREV SREV SREV	LEACHATE VOLUME PARTICLE SIZE OVER 5 CM POST FILTER PH PRE FILTER PH RETAINED MOISTURE	'K-MWMT 'K-MWMT 'K-MWMT		1 1 1		units %	++	0.1	0.1			
SREV SREV SREV SREV SREV SREV	LEACHATE VOLUME PARTICLE SIZE OVER 5 CM POST FILTER PH PRE FILTER PH RETAINED MOISTURE TEMPERATURE	K-MWMT K-MWMT K-MWMT K-MWMT		1 1 1		units %	++	0.1	0.1			

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WG49	93997LFB1		Tag:					M	easure	d:	3/27/2	2020 8:22	46 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text '	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.01			
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	PREP366	66665114	1		hrs	++						
SREV	LEACHATE VOLUME	PREP	5003.9	1		mL	++						
SREV	POST FILTER PH	TEXT		1		units	++			5.87			
SREV	PRE FILTER PH	TEXT		1		units	++			5.67			
SREV	TEMPERATURE	PREP	22.1	1		С	++	0.1	0.1				
SREV	TIME IN	DATE		1			++						
SREV	TIME OUT	DATE		1			++						
SREV	WEIGHT, DRY	PREP	0	1		g	++						
WG49	93997LFB2		Tag:					М	easure	d:	3/27/2	2020 12:1	1:20 PN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text '	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.01			
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	PREP366	66665114	1		hrs	++						
SREV	LEACHATE VOLUME	PREP	5003.9	1		mL	++						
SREV	POST FILTER PH	TEXT		1		units	++			5.87			
SREV	PRE FILTER PH	TEXT		1		units	++			5.67			
SREV	TEMPERATURE	PREP	22.1	1		С	++	0.1	0.1				
SREV	TIME IN	DATE		1			++						
SREV	TIME OUT	DATE		1			++						
SREV	WEIGHT, DRY	PREP	0	1		g	++						
WG49	93997CCV2		Tag:					М	easure	d:	3/27/2	2020 3:59	:54 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			4.02			
SREV	POST FILTER PH	TEXT		1		units	NEED			3.98			
SREV	PRE FILTER PH	TEXT		1		units	NEED			3.99			
SREV	TEMPERATURE	PREP	21.2	1		С	NEED	0.1	0.1				

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QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE QC List Type: I-X-MWME QCListMatClass: SOLID

Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT SOP Ref: SOPSO036

## WG494001



Start Date/Time: 03/26/2020 10:00 Create Date: 03/20/2020 10:11 Instrument ID: SOILSPREP Analyst: GKH ACZ Dept: 20

ACZ Laboratories, Inc.

End Date/Time: 03/27/2020 17:00

Temper ature	<u>©</u>	21.6	21.4	21.4	21.8	20.4	20.2	20.2	20.2	20.2	20.2	20.2	20	20	19.7	21.2	20.2	20.2	20.4	20.3	20.4	20.4	21.2
Extracti Temper on Time ature	(hrs)					24.25000000012	27.1666666669	27.1666666669	27.16666666699	27.16666666669	27.1666666669	25.00000000012	26.50000000012	25.9166666680	27.9166666669		28.1666666680	27.4166666680	27.9166666669	28.9166666680	24.25000000012	24.2500000012	
Time Out						3/27/2020 11:45:00 AM	3/27/2020 2:40:00 PM	3/27/2020 2:40:00 PM	3/27/2020 2:40:00 PM	3/27/2020 2:40:00 PM	3/27/2020 2:40:00 PM	3/27/2020 12:30:00 PM	3/27/2020 2:00:00 PM	3/27/2020 1:25:00 PM	3/27/2020 3:25:00 PM		3/27/2020 3:40:00 PM	3/27/2020 2:55:00 PM	3/27/2020 3:25:00 PM	3/27/2020 4:25:00 PM	3/27/2020 11:45:00 AM	3/27/2020 11:45:00 AM	
Time In			er.			3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM		3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	3/26/2020 11:30:00 AM	
Retaine d d Moisture	(%)						4.93	4.93	4.93	4.93	4.93	8.55	11.92	10.76	9.43		15.39	8.62	10.08	20.10			
Leachat Retaine Time In e d Volume Moisture	(mr)					5012.9	5022.8	5022.8	5022.8	5022.8	5022.8	5001	5003.8	5004.5	5019.8		5029.8	5012.5	5003.1	5042.3	5012.9	5012.9	
	(ð)					0	2000	2000	2000	2000	2000	2000	2000	2000	2000		2000	2000	2000	2000	0	0	
Post ilter pH	(units)	10.06	6.99	2.07	4.04	5.54	7.24	7.24	7.24	7.24	7.24	7.32	7.41	7.49	7.78	4.03	8.54	8.11	8.92	8.53	5.54	5.54	4.03
Pre Post Dry Filter pH Filter pH Weight	(nuits)	10.06	6.99	2.07	3.99	5.33	7.16	7.16	7.16	7.16	7.16	7.27	7.35	7.43	7.76	4.04	8.36	8.26	8.95	8.52	5.33	5.33	4.05
Extracti on Temper ature	<u>O</u>					23	23	23	23	23	23	23	23	23	23		23	23	23	23	23	23	
Extracti on pH	(units)	10.05	6.97	2.07	3.95	5.06	5.06	5.06	5.06	5.06	5.06	5.06	5.06	5.06	5.06	4.02	5.06	5.06	5.06	5.06	5.06	5.06	4
Particle Size over 5 cm	(%)						8.97	8.97	8.97	8.97	8.97	3.12	0	8.8	8.07		0	0	0	2.87			
Analysis Date		03/26/20 10:00	03/26/20 11:28	03/26/20 12:57	03/26/20 14:25	03/26/20 15:54	03/26/20 17:22	03/26/20 18:51	03/26/20 20:19	03/26/20 21:48	03/26/20 23:17	03/27/20 0:45	03/27/20 2:14	03/27/20 3:42	03/27/20 5:11	03/27/20 6:39	03/27/20 8:08	03/27/20 9:37	03/27/20 11:05	03/27/20 12:34	03/27/20 14:02	03/27/20 15:31	03/27/20 16:59
P.																							
SubSX Pri		As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec	As Rec				
Client ID		NONE	NONE	NONE	PCN58541	NONE	WRSB228_0.5-3	MS200120-3	MS200120-3	11200302-4	11200302-4	WRSB228-FD_0.5-3	WRSB228_6-15	WRSB227_0.5-3	WRSB227-FD_0.5-3	PCN58541	WRSB227_6-15	WRSB233_0.5-3	WRSB233_6-15	WRSB237_0.5-3	11200302-4	MS200120-3	PCN58541
ACZ ID		WG494001CSTD1	WG494001CSTD2	WG494001CSTD3	WG494001ICV	WG494001PBS	L57215-17	L57215-17MS1	L57215-17MSD1	L57215-17MS2	L57215-17MSD2	L57215-18	L57215-19	L57215-20	L57217-01	WG494001CCV1	L57217-02	L57217-03	L57217-04	L57217-05	WG494001LFB1	WG494001LFB2	WG494001CCV2
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Internal Comments

Report Comments:

QC List Type: I-X-MWME QCListMatClass: SOLID

QC Ref: CSTD3X-PBS-LFB-MSX2 Bench Sheet List: I-RFA-CN-FREE Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT SOP Ref: SOPSO036

BUCKET || Soils hallway

ICP Spike ICPMS Spike ICPMS Spike

> L57215-17MSD1 L57215-17MSD2

L57215-17MS2

L57215-17MS1 L57215-17

Login Comments

Sample

BUCKET || Soils hallway

BUCKET || Soils hallway BUCKET || Soils hallway BUCKET || Soils hallway

BUCKET || Soils hallway

L57215-18 L57215-19 57215-20 L57217-01 L57217-02 L57217-03

ICP Spike

BUCKET | Soils hallway

BUCKET || Soils hallway BUCKET || Soils hallway

WG494001CCV1 WG494001CCV2

L57217-04 L57217-05

PH QC

PH 00

WG494001CSTD3 WG494001CSTD1 WG494001CSTD2

WG494001ICV

WG494001LFB1 WG494001LFB2

ICPMS LFB



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ACZ Laboratories, Inc

AREV:	Intials, Date	SREV:	Initials, Date	3/31/2020 2:37:18 PM 22620
Report Comments:		Internal Comments		Page 2 of 2

ACZ Laboratories, Inc. Geochemistry Department Data Review and Reagents  Analyst (14)  Workgroup: Walfi (10)  Analysis Date: 3/26/20 - 3/27/20  Sample type used: 60  Extraction, Digestion / Analysis (Prep) C	I.	Data Revid Date: 3/3/ Approved: Date:	/20	GK1 1-2	H .Q
		V	00	No	N/A
1. Is the raw data checked to the computer prin	tout for transcription errors?	I	es	100	IN/A
2. Is the %solid or TS attached for dilution fact	ors?	7.			
3. Were proper volumes of reagents used per fi	nal volume?				
4. Was the proper sub-sample used (as received R&P, RPLL)?	d, lient prep,<2000, <500, <250, d	ry,			
5. Were the dilution factor calculation checked	(final volume, weight, %solid)?	-   -	-		
6. Did the RPD pass?					
7. Does all the spike information correlate with	each other?		/		
8. Is the appropriate spike in the computer-desi	gnated line?	1			
9. Are all errors properly corrected (single-line	crossout, dated & initialed)?	1	/		
10. Is the standard/reagent information comple		1 '			
11. Is your instrument calibration passing (and	included in the data package if nee	ded)?	/		
FOR SREV: QA/QC approval for initial traini	ng or 2 sets of initials for WG & Ll	IMS?	7		
Standard/Reagent/Equipment*	PCN/SCN/LOT #*	Exn	irat	ion D	ate
BUFFER 10	59339	3/	21/2	21	
7 7	60476	7/	31/2	1	
¥ 2	58293	12/	[3]	20	
		1	- <del></del>		
*Workers de la constant de la consta	1 () () 11 "				
*Workgroup documentation must include the lot nu	moer(s) of all disposable vessels used f	or volumetr	ic me	asureme	ents.
Comments:			- 40		
	4-2-4-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	****			

### **METEORIC WATER MOBILITY TEST**

ACZ Laboratories, Inc.	
2773 Downhill Dr	
Steamboat Spring	s, CO 80487

Analyst: GKH Date: 3/26/20 10a Start Time: 3/27/20 5p End Time:

Workgroup Number: WG494001

### Loaded Sample Wet Weight

Sx Number	Sx Wet Weight
3x Number	(g)
L57215-17	5061
L57215-18	5066
L57215-19	5115
L57215-20	5198
L57217-01	5209
L57217-02	5201
L57217-03	5089
L57217-04	5105
L57217-05	5605

H2O rate start: 3.5mL/Min H2O rate finish: 3.5mL/Min

Filter Type/pore size: .45um

**Special Comments:** 

### **Dry Weight Calculations**

	. 4								
Sx Number	Sx Weight (g) (From above)	(x)	% Solid	=	Dry Sx Weight (g)	+	Cubetaine Weight (g	=	Target Leachate & Cubtainer Wt (g)
L57215-17	5061	х	0.987960693	=	5000.069067	+	140.6	=	5140.66907
L57215-18	5066	Х	0.98697517	=	5000.016212	+	136.3	=	5136.31621
L57215-19	5115	Х	0.977709773	=	5000.985489	+	139.2	=	5140.18549
L57215-20	5198	Х	0.96197051	=	5000.322712	+	140	1=	5140.32271
L57217-01	5209	Х	0.959916368	=	5000.204361	+	136.8	=	5137.00436
L57217-02	5201	Х	0.961455847	=	5000.531862	+	141.4	=	5141.93186
L57217-03	5089	Х	0.982697941	=	5000.949824	+	138.9	=	5139.84982
L57217-04	5105	Х	0.979556121	Ξ	5000.633999	+	138.9	=	5139.534
L57217-05	5605	Х	0.892226043	=	5000.926971	+	138	=	5138.92697

### Final Leachate Weight

Sx Number	Actual Leachate & Cubetainer	<u>-</u>	Cubetainer Wt (g)	=	Final Leachate Volume (mL)
L57215-17	5163.4	-	140.6	=	5022.8
L57215-18	5137.3	-	136.3	=	5001
L57215-19	5143	-	139.2	=	5003.8
L57215-20	5144.5	-	140	=	5004.5
L57217-01	5156.6		136.8	=	5019.8
L57217-02	5171.2	-	141.4	=	5029.8
L57217-03	5151.4	-	138.9	=	5012.5
L57217-04	5142	-	138.9	=	5003.1
L57217-05	5180.3	_	138	=	5042.3

Comments:

Qualtrax ID: 1220

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ACZID: FRMSO004 L57215-2007241055

### **METEORIC WATER MOBILITY TEST**

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487

Analyst: **GKH**Date:
Start Time: 3/26/20 10a
End Time: 3/27/20 5p

Workgroup Number: WG494001

### **Feed Moisture**

Sx Number	Pan Weight (g)	Wet Sx + Pan	Dry Sx + Pan	% Solid	% Feed
	. dir Weight (g)	Weight (g)	Weight (g)	% 30Hd	Moisture
L57215-17	151.34	653.03	646.99	98.79606929	1.203930714
L57215-18	141.45	649.71	643.09	98.69751702	1.302482981
L57215-19	150.63	657.13	645.84	97.7709773	2.229022705
L57215-20	137.29	638.48	619.42	96.19705102	3.802948981
L57217-01	160.74	662.94	642.81	95.9916368	4.008363202
L57217-02	150.48	653.28	633.9	96.14558473	3.854415274
L57217-03	146.19	654.8	646	98.26979414	1.730205855
L57217-04	146.72	649.56	639.28	97.95561212	2.044387877
L57217-05	145.48	648.57	594.35	89.22260431	10.77739569

**Screening-Particle Size** 

Sx Number	Sx Weight (g)	Sx > 5 cm (g)	Sx < 5 cm (g)	%Sx > 5cm	%Sx < 5cm
L57215-17	8129.39	728.88	7400.51	8.965986378	91.03401362
L57215-18	7214.84	225.15	6989.69	3.120651324	96.87934868
L57215-19	5115	0	5115	0	100
L57215-20	7167.47	630.38	6537.09	8.79501414	91.20498586
L57217-01	5828.2	470.56	5357.64	8.073847843	91.92615216
L57217-02	160.74	0	160.74	0	100
L57217-03	150.48	0	150.48	0	100
L57217-04	146.19	0	146.19	0	100
L57217-05	7868.14	225.64	7642.5	2.867767986	97.13223201

### Residual Moisture

Sx Number	Pan Weight (g)	Wet Sx + Pan	Dry Sx + Pan	0/ 5 -1:-1	0.0
3x (Vallibe)	nan weight (g)	Weight (g)	Weight (g)	% Solid	% Res. Moisture
L57215-17	71.92	327.43	314.83	95.06868616	4.931313843
L57215-18	73.65	319.29	298.29	91.45090376	8.549096238
L57215-19	73.03	359.34	325.22	88.08284726	11.91715274
L57215-20	77.51	312.21	286.96	89.241585	10.758415
L57217-01	75.79	387.87	358.43	90.5665214	9.433478595
L57217-02	79.01	392.41	344.19	84.61391193	15.38608807
L57217-03	75.84	361.14	336.55	91.38100245	8.618997546
L57217-04	70.77	314.43	289.86	89.91627678	10.08372322
L57217-05	72.62	265.78	226.96	79.90267136	20.09732864

Time and Temperature for Residual Moisture: 48Hr @105c

Sample Description: Sand/ Swmall-Mid sized aggregate

Centrifuge or pre-filter? No

Observation of changes:

N/A

Storage Conditions of "as rec" sample: Room

ACZID: FRMSO004

L57215-2007241055

Qualtrax ID: 1220 Page 243 of 251

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Bench Sheet List: I-RFA-CN-FREE Group ID: SP-G-MWMT SOP Ref: SOPSO036 QC List Type: I-X-MWME QCListMatClass: SOLID

# WG494001



ACZ Laboratories, Inc Create Date: 03/20/2020 10:11 Instrument ID: SOILSPREP ACZ Dept: 20 Analyst: Start Date/Time: End Date/Time:

Leachate Retained Time In Time Out Extractio Tempera Volume Moisture n Time ture	<u>(</u> )	•	0.7°	71.4	21.7	27.0	70.7	7.07				٠ (	40.4	20.0	20.02	7.7	26.4	7.07	6.7.	40.4	40.5		,	
t Extractic n Time	(hrs)																							
ime Ou																								•
me In T		4			1																		+	-
eachate Retained Ti	(%)																j	h-						-
Leachate Volume	(mL)																		İ					-
Dry Weight	(a)																							-
Pre Post Filter pH	(units)				707	ノビアン	200	1.43			-1	7227	7.7%	727	1.70	14 PC 14 PC	מינים	0.0	647	ייני מייני מייני			102	
	(units)	10 01	7000	700	200	127	12.5	2 -			1	77.77	7367	7.22	776	7077	70	2,00	000	2000 000	1		406 402	
Extractio Extractio n pH n Tempera ture	<u>(</u> )					80	)  -	-			7	_			1	7	22	ŋ				1		
Extractio n pH	(nuits)	1000	26%	せつ	295	25	3 -								t	100 h	70.0	2	_			1	7,0%	
Particle Size over 5	(%)																						7	-
SubSX Pri Analysis Date																								
P.		-														ļ_	-			-				
Sabs																								
Client ID		NONE	NONE	NONE	PCN58541	NONE	WRSB228_0.5-3	MS200120-3	MS200120-3	H200302-4	11200302-4	WRSB228-FD_0.5-3	WRSB228_6-15	WRSB227_0.5-3	WRSB227-FD_0.5-3	PCN58541	WRSB227_6-15	WRSB233_0.5-3	WRSB233_6-15	WRSB237_0.5-3	11200302-4	MS200120-3	PCN58541	
ACZ ID		WG494001CSTD1	WG494001CSTD2	WG494001CSTD3	WG4940011CV	WG494001PBS	L57215-17	L57215-17MS1	L57215-17MSD1	L57215-17MS2	L57215-17MSD2	L57215-18	L57215-19	L57215-20	L57217-01	WG494001CCV1	L57217-02	L57217-03	L57217-04	L57217-05	WG494001LFB1	WG494001LFB2	WG494001CCV2	
₩ ơ		_	2	3	4	2	9	7	œ	6	10	11	12	33	4	15	16	17	82	6	20	7.	22	

AREV:	Initials, Date	SREV:	Initials, Date	3/20/2020 10:12:41 AM 22620
Report Comments:		nternal Comments		Page 1 of 2

QC List Type: I-X-MWME QCListMatClass: SOLID

Bench Sheet List: I-RFA-CN-FREE

QC Ref: CSTD3X-PBS-LFB-MSX2 Method Ref: ASTM E2242-13 Group ID: SP-G-MWMT

SOP Ref: SOPSO036

## WG494001



### ACZ Laboratories, Inc Create Date: 03/20/2020 10:11 Instrument ID: SOILSPREP ACZ Dept: 20 Analyst: Start Date/Time: End Date/Time:

	l																			
Login Comments	BUCKET    Soils hallway	ICPMS Spike	ICP Spike	ICPMS Spike	ICP Spike	BUCKET    Soils hallway	BUCKET   Soils hallway	BUCKET    Soils hallway	BUCKET    Soils hallway	BUCKET    Soils hallway	BUCKET    Soils hallway	BUCKET    Soils hallway	BUCKET    Soils hallway	pH QC	pH QC	pH QC	pH QC	pH QC	pH QC	ICP LFB
Sample	L57215-17	L57215-17MS1	L57215-17MS2	L57215-17MSD1	L57215-17MSD2	L57215-18	L57215-19	L57215-20	L57217-01	L57217-02	L57217-03	L57217-04	L57217-05	WG494001CCV1	WG494001CCV2	WG494001CSTD1	WG494001CSTD2	WG494001CSTD3	WG494001ICV	WG494001LFB1
055	5																			

ICPMS LFB

WG494001LFB2

AREV: Initials, Date	SREV: Initials, Date	3/20/2020 10:12:41 AM 22620
		Page 2 of 2
Report Comments:	Internal Comments	

L57215-20072410

### Workgroup Review and Approval

WG494001

Date Reported: 07-Apr-20

Run ID: R1776152

Date Analyzed: 26-Mar-20

ICAL Workgroup:

Instrument ID: SOILSPREP

WG49	94001ICV		Tag:					M	easure	ed:	3/26/	2020 2:25	:42 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			3.95			
SREV	POST FILTER PH	TEXT		1		units	NEED			4.04			
SREV	PRE FILTER PH	TEXT		1		units	NEED			3.99			
SREV	TEMPERATURE	PREP	21.8	1		С	NEED	0.1	0.1				
WG49	94001PBS		Tag:					M	easure	ed:	3/26/	2020 3:54	:16 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.06			
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	PREP)0	000001164	1		hrs	++						
SREV	LEACHATE VOLUME	PREP	5012.9	1		mL	++						
SREV	POST FILTER PH	TEXT		1		units	++			5.54			
SREV	PRE FILTER PH	TEXT		1		units	++			5.33			
SREV	TEMPERATURE	PREP	20.4	1		С	++	0.1	0.1				
SREV	TIME IN	DATE		1			++						
SREV	TIME OUT	DATE		1			++						
SREV	WEIGHT, DRY	PREP	0	1		g	++						
L572′	15-17		Tag:					M	easure	ed:	3/26/	2020 5:22	:50 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text	Value	Ext Qual	Signal
SREV	EXTRACTION PH	√WMT-96		1		units	++			5.06			
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	27.16667	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	5022.8	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	8.97	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			7.24			
SREV	PRE FILTER PH	√WMT-96		1		units	++			7.16			
יחריי	RETAINED MOISTURE	√WMT-96		1		%	++			4.93			
SREV													
SREV	TEMPERATURE	MWMT-96	20.2	1		С	++	0.1	0.1				
	TEMPERATURE TIME IN	VWMT-96	20.2	1 1		С	++	0.1	0.1				
SREV			20.2			С		0.1	0.1				

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Parm_Stored  XTRACTION PH EXTRACTION EMPERATURE EXTRACTION TIME EACHATE VOLUME ARTICLE SIZE OVER 5 CM OST FILTER PH ETAINED MOISTURE EMPERATURE IME IN IME OUT VEIGHT, DRY  Parm_Stored  XTRACTION PH EXTRACTION	<b>Type</b> TEXT	23 66666861 5022.8 8.97 20.2 5000 Tag: Value	1 1 1 1 1 1 1 1 1 1 1	Qual	Units units C hrs mL % units units C  G	++ ++ ++ ++ ++ ++ ++ ++ ++ ++	MDL 0.1	PQL 0.1 0.1	7.24 7.16 4.93		Signal
EXTRACTION EMPERATURE EXTRACTION TIME EACHATE VOLUME ARTICLE SIZE OVER 5 CM OST FILTER PH RE FILTER PH ETAINED MOISTURE EMPERATURE IME IN IME OUT VEIGHT, DRY  Parm_Stored EXTRACTION PH EXTRACTION	REG PREP3666 PREP PREP TEXT TEXT TEXT PREP DATE DATE PREP Type TEXT	5022.8 8.97 20.2 5000	1 1 1 1 1 1 1 1 1		C hrs mL % units units % C	++ ++ ++ ++ ++ ++ ++ ++		0.1	7.24 7.16 4.93		
EMPERATURE EXTRACTION TIME EACHATE VOLUME ARTICLE SIZE OVER 5 CM OST FILTER PH ETAINED MOISTURE EMPERATURE IME IN IME OUT VEIGHT, DRY  Parm_Stored EXTRACTION PH	PREP3666 PREP PREP TEXT TEXT TEXT PREP DATE DATE PREP	5022.8 8.97 20.2 5000	1 1 1 1 1 1 1 1 1		hrs mL % units units C	++ ++ ++ ++ ++ ++ ++		0.1	7.16 4.93		
EXTRACTION TIME EACHATE VOLUME ARTICLE SIZE OVER 5 CM OST FILTER PH RE FILTER PH ETAINED MOISTURE EMPERATURE IME IN IME OUT VEIGHT, DRY  Parm_Stored EXTRACTION PH	PREP PREP TEXT TEXT TEXT PREP DATE DATE PREP	5022.8 8.97 20.2 5000	1 1 1 1 1 1 1 1		mL % units units % C	++ ++ ++ ++ ++ ++ ++	0.1		7.16 4.93		
ARTICLE SIZE OVER 5 CM OST FILTER PH RE FILTER PH ETAINED MOISTURE EMPERATURE IME IN IME OUT VEIGHT, DRY  PARM_Stored  XTRACTION PH EXTRACTION	PREP TEXT TEXT PREP DATE DATE PREP	8.97 20.2 5000 <b>Tag:</b>	1 1 1 1 1 1 1		% units units % C	++ ++ ++ ++ ++ ++	0.1		7.16 4.93		
OST FILTER PH RE FILTER PH ETAINED MOISTURE EMPERATURE IME IN IME OUT /EIGHT, DRY  E-17MSD1 Parm_Stored  XTRACTION PH EXTRACTION	TEXT TEXT PREP DATE DATE PREP	20.2 5000 <b>Tag:</b>	1 1 1 1 1 1 1		units units % C	++ ++ ++ ++ ++	0.1		7.16 4.93		
RE FILTER PH  ETAINED MOISTURE  EMPERATURE  IME IN  IME OUT  /EIGHT, DRY  E-17MSD1  Parm_Stored  XTRACTION PH  EXTRACTION	TEXT TEXT PREP DATE DATE PREP	5000 <b>Tag:</b>	1 1 1 1 1 1		units % C	++ ++ ++ ++	0.1		7.16 4.93		
ETAINED MOISTURE  EMPERATURE  IME IN  IME OUT  /EIGHT, DRY  E-17MSD1  Parm_Stored  XTRACTION PH  EXTRACTION	TEXT PREP DATE DATE PREP  Type TEXT	5000 <b>Tag:</b>	1 1 1 1 1		% C	++ ++ ++ ++	0.1		4.93		
EMPERATURE  IME IN  IME OUT  /EIGHT, DRY  I-17MSD1  Parm_Stored  XTRACTION PH  EXTRACTION	PREP DATE DATE PREP  Type TEXT	5000 <b>Tag:</b>	1 1 1 1		С	++ ++ ++	0.1				
IME IN IME OUT VEIGHT, DRY  S-17MSD1 Parm_Stored  XTRACTION PH EXTRACTION	PREP DATE DATE PREP  Type TEXT	5000 <b>Tag:</b>	1 1 1			++	0.1				
F-17MSD1 Parm_Stored EXTRACTION	DATE DATE PREP  Type TEXT	5000 <b>Tag:</b>	1 1 1			++					
F-17MSD1 Parm_Stored EXTRACTION PH	DATE PREP  Type  TEXT	Tag:	1		g						
2-17MSD1 Parm_Stored EXTRACTION PH	Type TEXT	Tag:	1		g						
Parm_Stored  XTRACTION PH  EXTRACTION	<b>Type</b> TEXT	Tag:			9						
Parm_Stored  XTRACTION PH  EXTRACTION	<b>Type</b> TEXT		Dil								
XTRACTION PH	TEXT	Value	D:I				M	easure	ed: 3/2	26/2020 8:19	:58 PM
EXTRACTION			ווט	Qual	Units	Appv	MDL	PQL	Text Value	ie Ext Qual	Signal
			1		units	++			5.06		
EMPERATURE	REG	23	1		С	++	0.1	0.1			
EXTRACTION TIME	PREP3666	66666861	1		hrs	++					
EACHATE VOLUME	PREP	5022.8	1		mL	++					
ARTICLE SIZE OVER 5 CM	PREP	8.97	1		%	++					
OST FILTER PH	TEXT		1		units	++			7.24		
RE FILTER PH	TEXT		1		units	++			7.16		
ETAINED MOISTURE	TEXT		1		%	++			4.93		
EMPERATURE	PREP	20.2	1		С	++	0.1	0.1			
IME IN	DATE		1			++					
IME OUT	DATE		1			++					
/EIGHT, DRY	PREP	5000	1		g	++					
-17MS2		Tag:					М	easure	ed: 3/2	26/2020 9:48	:32 PM
arm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Val	ue Ext Qual	Signal
XTRACTION PH	TEXT		1		units	++			5.06		
EXTRACTION EMPERATURE	REG	23	1		С	++	0.1	0.1			
EXTRACTION TIME	PREP3666	66666861	1		hrs	++					
EACHATE VOLUME	PREP	5022.8	1		mL	++					
ARTICLE SIZE OVER 5 CM	PREP	8.97	1		%	++					
OST FILTER PH	TEXT		1		units	++			7.24		
RE FILTER PH	TEXT		1		units	++			7.16		
ETAINED MOISTURE	TEXT		1		%	++			4.93		
EMPERATURE		20.2	1		С	++	0.1	0.1			
IME IN					=	++		J			
IME OUT											
		5000			a						
DEACREENIN / X DEDEACREENIN	EMPERATURE XTRACTION TIME EACHATE VOLUME ARTICLE SIZE OVER 5 CM DOST FILTER PH RE FILTER PH ETAINED MOISTURE EMPERATURE ME IN ME OUT EIGHT, DRY  -17MS2 arm_Stored  XTRACTION PH XTRACTION TIME EACHATE VOLUME ARTICLE SIZE OVER 5 CM DOST FILTER PH RE FILTER PH ETAINED MOISTURE EMPERATURE ME IN  ME OUT  EMPERATURE  ME OUT  EACHATE VOLUME ARTICLE SIZE OVER 5 CM DOST FILTER PH ETAINED MOISTURE  EMPERATURE  ME IN	EMPERATURE XTRACTION TIME PREP3660 EACHATE VOLUME PREP ARTICLE SIZE OVER 5 CM PREP DST FILTER PH TEXT ETAINED MOISTURE PREP ME IN DATE EIGHT, DRY PREP  TATT	EMPERATURE XTRACTION TIME PREP36666666861 EACHATE VOLUME PREP 5022.8 ARTICLE SIZE OVER 5 CM PREP 8.97 DST FILTER PH TEXT ETAINED MOISTURE TEXT EMPERATURE PREP 20.2 ME IN DATE EIGHT, DRY PREP 5000  Tag:  T	EMPERATURE  XTRACTION TIME PREP36666666861 1 EACHATE VOLUME PREP 5022.8 1 ARTICLE SIZE OVER 5 CM PREP 8.97 1 DST FILTER PH TEXT 1 ETAINED MOISTURE TEXT 1 EMPERATURE PREP 20.2 1 ME IN DATE 1 EIGHT, DRY PREP 5000 1  TAGE:	EMPERATURE XTRACTION TIME PREP36666666861 1 EACHATE VOLUME PREP 5022.8 1 ARTICLE SIZE OVER 5 CM PREP 8.97 1 DST FILTER PH TEXT 1 ETAINED MOISTURE TEXT 1 EMPERATURE PREP 20.2 1 ME IN DATE 1 EIGHT, DRY PREP 5000 1  TAGE:  TAGE  TA	EMPERATURE XTRACTION TIME	EMPERATURE  XTRACTION TIME	EMPERATURE XTRACTION TIME	EMPERATURE  XTRACTION TIME	EMPERATURE  XTRACTION TIME PREP)6666666861 1 hrs ++ EACHATE VOLUME PREP 5022.8 1 mL ++ EACHATE VOLUME PREP 5022.8 1 mL ++ BARTICLE SIZE OVER 5 CM PREP 8.97 1 % ++  DST FILTER PH TEXT 1 units ++  T.24  RE FILTER PH TEXT 1 units ++  T.16  ETAINED MOISTURE TEXT 1 White H+  ME OUT DATE 1 ++  EIGHT, DRY PREP 5000 1 g ++  TARTICLE SIZE OVER 5 CM  Type Value Dil Qual Units Appv MDL PQL Text Value  CITRACTION PH TEXT 1 units ++  TARTICLE SIZE OVER 5 CM  PREP 5002.8 1 mL ++  BEACHATE VOLUME PREP 5022.8 1 mL ++  DST FILTER PH TEXT 1 units ++  TARTICLE SIZE OVER 5 CM  PREP 8.97 1 % ++  DST FILTER PH TEXT 1 units ++  T.24  REFILTER PH TEXT 1 units ++  T.25  REFILTER PH TEXT 1 units ++  T.26  REFILTER PH TEXT 1 units ++  T.27  REFILTER PH TEXT 1 units ++  T.28  REFILTER PH TEXT 1 units ++  T.29  REFILTER PH TEXT 1 units ++  T.20  REFILTER PH TEXT 1 units ++  T.21  REFILTER PH TEXT 1 units ++  T.24  REFILTER PH TEXT 1 units ++  T.25  REFILTER PH TEXT 1 units ++  T.26  REFILTER PH TEXT 1 units ++  T.27  REFILTER PH TEXT 1 units ++  T.29  REFILTER PH TEXT 1 units ++  T.16  REFILTER PH TEXT 1 units ++  T.26  REFILTER PH TEXT 1 units ++  T.26  REFILTER PH TEXT 1 units ++  REF	EMPERATURE  XTRACTION TIME

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L572	15-17MSD2		Tag:					M	easure	ed:	3/26/	2020 11:1	7:06 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text V	/alue	Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.06			
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	PREP366	66666861	1		hrs	++						
SREV	LEACHATE VOLUME	PREP	5022.8	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	PREP	8.97	1		%	++						
SREV	POST FILTER PH	TEXT		1		units	++			7.24			
SREV	PRE FILTER PH	TEXT		1		units	++			7.16			
SREV	RETAINED MOISTURE	TEXT		1		%	++			4.93			
SREV	TEMPERATURE	PREP	20.2	1		С	++	0.1	0.1				
SREV	TIME IN	DATE		1			++						
SREV	TIME OUT	DATE		1			++						
SREV	WEIGHT, DRY	PREP	5000	1		g	++						
L572	15-18		Tag:					M	easure	ed:	3/27/	2020 12:4	5:40 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text V	/alue	Ext Qual	Signal
SREV	EXTRACTION PH	иWMT-96		1		units	++			5.06			
SREV	EXTRACTION TEMPERATURE	WMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	MWMT-96	25	1		hrs	++						
SREV	LEACHATE VOLUME	MWMT-96	5001	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	3.12	1		%	++						
SREV	POST FILTER PH	MWMT-96		1		units	++			7.32			
SREV	PRE FILTER PH	MWMT-96		1		units	++			7.27			
SREV	RETAINED MOISTURE	MWMT-96		1		%	++			8.55			
SREV	TEMPERATURE	MWMT-96	20.2	1		С	++	0.1	0.1				
SREV	TIME IN	MWMT-96		1			++						
SREV	TIME OUT	MWMT-96		1			++						
SREV	WEIGHT, DRY	vwwt-96	5000	1		g	++						
L572	15-19		Tag:					M	easure	ed:	3/27/	2020 2:14	:14 AM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text V	/alue	Ext Qual	Signal
SREV	EXTRACTION PH	WMT-96		1		units	++			5.06			
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	26.5	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	5003.8	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	√WMT-96	0	1		%	++						
SREV	POST FILTER PH	√WMT-96		1		units	++			7.41			
SREV	PRE FILTER PH	√WMT-96		1		units	++			7.35			
SREV	RETAINED MOISTURE	WMT-96		1		%	++			11.92			
SREV	TEMPERATURE	WMT-96	20.0	1		С	++	0.1	0.1				
	TIME IN	WMT-96		1			++						
SREV													
SREV SREV	TIME OUT	MWMT-96		1			++						

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L572	15-20		Tag:					M	leasure	ed:	3/27/	2020 3:42	:48 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	/alue	Ext Qual	Signa
SREV	EXTRACTION PH	√WMT-96		1		units	++			5.06		TA	
SREV	EXTRACTION TEMPERATURE	WMT-96	23.0	1		С	++	0.1	0.1			TA	
SREV	EXTRACTION TIME	MWMT-96	25.91667	1		hrs	++					TA	
SREV	LEACHATE VOLUME	MWMT-96	5004.5	1		mL	++					TA	
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	8.8	1		%	++					TA	
SREV	POST FILTER PH	MWMT-96		1		units	++			7.49		TA	
SREV	PRE FILTER PH	MWMT-96		1		units	++			7.43		TA	
SREV	RETAINED MOISTURE	√WMT-96		1		%	++			10.76		TA	
SREV	TEMPERATURE	√WMT-96	20.0	1		С	++	0.1	0.1			TA	
SREV	TIME IN	√WMT-96		1			++					TA	
SREV	TIME OUT	MWMT-96		1			++					TA	
SREV	WEIGHT, DRY	иWMT-96	5000	1		g	++					TA	
L572′	17-01		Tag:					N	leasure	ed:	3/27/	2020 5:11	:22 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	/alue	Ext Qual	Signa
SREV	EXTRACTION PH	√WMT-96		1		units	++			5.06			
SREV	EXTRACTION TEMPERATURE	иWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	√WMT-96	27.91667	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	5019.8	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	8.07	1		%	++						
SREV	POST FILTER PH	WMT-96		1		units	++			7.78			
SREV	PRE FILTER PH	WMT-96		1		units	++			7.76			
SREV	RETAINED MOISTURE	WMT-96		1		%	++			9.43			
SREV	TEMPERATURE	WMT-96	19.7	1		С	++	0.1	0.1				
SREV	TIME IN	WMT-96		1			++						
SREV	TIME OUT	WMT-96		1			++						
SREV	WEIGHT, DRY	WMT-96	5000	1		g	++						
WG49	94001CCV1		Tag:					N	leasure	ed:	3/27/	2020 6:39	:56 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	/alue	Ext Qual	Signa
SREV	EXTRACTION PH	TEXT		1		units	NEED			4.02			
SREV	POST FILTER PH	TEXT		1		units	NEED			4.03			
SREV	PRE FILTER PH	TEXT		1		units	NEED			4.04			
SREV	TEMPERATURE	PREP	21.2	1		С	NEED	0.1	0.1				
_572′	17-02		Tag:					N	leasure	ed:	3/27/	2020 8:08	:30 AN
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text \	/alue	Ext Qual	Signa
SREV	EXTRACTION PH	√WMT-96		1		units	++			5.06			-
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1				
SREV	EXTRACTION TIME	MWMT-96	28.16667	1		hrs	++						
SREV	LEACHATE VOLUME	√WMT-96	5029.8	1		mL	++						
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	0	1		%	++						
SREV	POST FILTER PH	VWMT-96		1		units	++			8.54			
	PRE FILTER PH	√WMT-96		1		units	++			8.36			
SREV	RETAINED MOISTURE	MWMT-96		1		%	++			15.39			
	RETAINED MOISTORE		00.0	4		С	++	0.1	0.1				
SREV	TEMPERATURE	MWMT-96	20.2	1		•							
SREV SREV		иWMT-96 иWMT-96	20.2	1			++						
SREV SREV SREV SREV SREV	TEMPERATURE		20.2				++						

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L57217-03			Tag:						easure	ed: 3/2	:04 AM	
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	MWMT-96		1		units	++			5.06		
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	MWMT-96	27.41667	1		hrs	++					
SREV	LEACHATE VOLUME	MWMT-96	5012.5	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	0	1		%	++					
SREV	POST FILTER PH	MWMT-96		1		units	++			8.11		
SREV	PRE FILTER PH	MWMT-96		1		units	++			8.26		
SREV	RETAINED MOISTURE	иWMT-96		1		%	++			8.62		
SREV	TEMPERATURE	иWMT-96	20.2	1		С	++	0.1	0.1			
SREV	TIME IN	иWMT-96		1			++					
SREV	TIME OUT	иWMT-96		1			++					
SREV	WEIGHT, DRY	VWMT-96	5000	1		g	++					
L572	17-04		Tag:					M	easure	ed: 3/2	7/2020 11:0	5:38 Al
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	MWMT-96		1		units	++			5.06		
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	MWMT-96	27.91667	1		hrs	++					
SREV	LEACHATE VOLUME	MWMT-96	5003.1	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	0	1		%	++					
SREV	POST FILTER PH	MWMT-96		1		units	++			8.92		
SREV	PRE FILTER PH	MWMT-96		1		units	++			8.95		
SREV	RETAINED MOISTURE	MWMT-96		1		%	++			10.08		
SREV	TEMPERATURE	иWMT-96	20.4	1		С	++	0.1	0.1			
SREV	TIME IN	иWMT-96		1			++					
SREV	TIME OUT	иWMT-96		1			++					
SREV	WEIGHT, DRY	VWMT-96	5000	1		g	++					
L572	17-05		Tag:					M	easure	ed: 3/2	7/2020 12:3	4:12 PI
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Value	Ext Qual	Signal
SREV	EXTRACTION PH	MWMT-96		1		units	++			5.06		
SREV	EXTRACTION TEMPERATURE	MWMT-96	23.0	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	MWMT-96	28.91667	1		hrs	++					
SREV	LEACHATE VOLUME	MWMT-96	5042.3	1		mL	++					
SREV	PARTICLE SIZE OVER 5 CM	MWMT-96	2.87	1		%	++					
SREV	POST FILTER PH	MWMT-96		1		units	++			8.53		
or⊏ v	PRE FILTER PH	иWMT-96		1		units	++			8.52		
		иWMT-96		1		%	++			20.10		
SREV	RETAINED MOISTURE	VI V I VI I -90						0.4	0.4			
SREV SREV	RETAINED MOISTURE TEMPERATURE	иwит-96 иwмт-96	20.3	1		С	++	0.1	0.1			
SREV SREV SREV		VWMT-96	20.3	1 1		С	++	0.1	0.1			
SREV SREV SREV SREV SREV SREV	TEMPERATURE		20.3			С		0.1	0.1			

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WG4	94001LFB1		Tag:					М	easure	ed: 3/2	7/2020 2:02	:46 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Valu	e Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.06		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP)00	00001164	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5012.9	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			5.54		
SREV	PRE FILTER PH	TEXT		1		units	++			5.33		
SREV	TEMPERATURE	PREP	20.4	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
WG4	94001LFB2		Tag:					М	easure	ed: 3/2	7/2020 3:31	:20 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Valu	e Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	++			5.06		
SREV	EXTRACTION TEMPERATURE	REG	23	1		С	++	0.1	0.1			
SREV	EXTRACTION TIME	PREP)00	00001164	1		hrs	++					
SREV	LEACHATE VOLUME	PREP	5012.9	1		mL	++					
SREV	POST FILTER PH	TEXT		1		units	++			5.54		
SREV	PRE FILTER PH	TEXT		1		units	++			5.33		
SREV	TEMPERATURE	PREP	20.4	1		С	++	0.1	0.1			
SREV	TIME IN	DATE		1			++					
SREV	TIME OUT	DATE		1			++					
SREV	WEIGHT, DRY	PREP	0	1		g	++					
WG4	94001CCV2		Tag:					М	easure	ed: 3/2	7/2020 4:59	:54 PM
Status	Parm_Stored	Туре	Value	Dil	Qual	Units	Appv	MDL	PQL	Text Valu	e Ext Qual	Signal
SREV	EXTRACTION PH	TEXT		1		units	NEED			4		
SREV	POST FILTER PH	TEXT		1		units	NEED			4.03		
	DDE EU TED DU	TEXT		1		units	NEED			4.05		
SREV	PRE FILTER PH	1 [ ]				นเมเอ	INCLU			4.00		

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